# Cancer Incidence and Mortality in Nebraska: 2010



September, 2013

The Nebraska Cancer Registry contains a wealth of information, not all of which is included in this report:

What types of data are available?

- Demographic: age at diagnosis, gender, race/ethnicity, county of residence
- Medical history: date of diagnosis, primary site, cell type, stage of disease at diagnosis
- Therapy: surgery, radiation therapy, chemotherapy, immunotherapy, hormone therapy
- Follow up: length of survival, cause of death

Who may request data from the Nebraska Cancer Registry?

- Medical Researchers
- Health Planners
- Market Researchers
- Health Care Facility Administrators
- Physicians
- Nurses
- Health Care Facility Cancer Committees
- Oncology Conference Planners and Speakers
- Patient Care Evaluators
- Pharmaceutical Companies
- Government Officials
- Concerned Citizens
- Students
- Media

How do I make a request?

Contact the Office of Health Statistics at the Nebraska Department of Health and Human Services Division of Public Health P.O. Box 95026, Lincoln, NE 68509-5026 Phone 402/471-2180, Monday-Friday between 8 AM and 5 PM

Please note: To comply with confidentiality regulations, the Nebraska Department of Health and Human Services reserves the right to limit the amount and type of data that are released in response to a request.

# NEBRASKA CANCER REGISTRY **2010 ANNUAL REPORT**

Nebraska Department of Health and Human Services

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### **EXECUTIVE SUMMARY**

The Cancer Incidence and Mortality in Nebraska annual report for 2010 provides a comprehensive overview of the impact of cancer in Nebraska. The purpose of the report is to present the most recent statistics that describe cancer incidence and mortality in Nebraska, for the entire state and by county and region; in-depth analyses of selected cancer sites; and comparisons of trends between Nebraska and the United States. Findings from the report include:

- Overall Cancer Incidence: In 2010, there were 8,887 diagnoses of cancer among Nebraska residents. This number is slightly higher than the number of cancers that were diagnosed in 2009 (8,736).
- Cancer Incidence by Gender: In 2010, prostate, lung, and colorectal cancers were the most frequently diagnosed cases among Nebraska men, while breast, lung, and colorectal cancers were the most frequently diagnosed cases among Nebraska women. Taken together, these cancers accounted for more than half of all cancer cases diagnosed among Nebraska residents in 2010.
- Cancer Incidence by Age: During the past five years (2006-2010), almost 60% of all cancers in Nebraska occurred among people 65 years of age and older. Less than 1% were diagnosed among children and adolescents (less than 18 years of age). The average age at diagnosis was 65.8 years of age.
- Cancer Incidence by Site: During the past five years (2006-2010), cancers of
  the cervix, liver, lung, stomach and melanomas were diagnosed significantly less
  often among Nebraska residents when compared to the rest of the U.S., while
  leukemia and colorectal cancers were diagnosed significantly more often.
- Cancer Incidence by Race: During the past decade (2001-2010), African-Americans in Nebraska were significantly more likely to be diagnosed with myeloma, colorectal, kidney, lung, prostate, stomach, and liver cancers than were whites. Liver cancer diagnoses were also significantly more frequent among Asian-American/Pacific Islanders and Hispanics compared to whites. Hispanics were also more likely to be diagnosed with stomach cancer when compared with whites.
- Overall Cancer Mortality: In 2010, 3,437 Nebraska residents died from cancer, which is an increase from the 2009 cancer death total of 3,336. This is the second year in a row that cancer has surpassed heart disease as Nebraska's leading cause of death, although it first occurred among Nebraska men in 2006.
- Cancer Mortality by Site: During the past five years (2006-2010), deaths from cancers of the stomach, liver, lung, female breast and cervix occurred significantly less often among Nebraska residents when compared to the rest of the U.S., while deaths from colorectal cancer and cancers of the brain and central nervous system occurred significantly more often. Lung cancer was the leading cause of cancer mortality in Nebraska in 2010, accounting for more than 25% of all cancer deaths, followed by colorectal cancer. During the past two

decades, the annual rates of prostate and female breast cancer deaths in Nebraska have both declined by about 40%, which is consistent with national trends. The number of prostate cancer deaths recorded in Nebraska in 2010 (167) is the state's lowest single-year total since 1977.

• Cancer Incidence by County: Below are the Nebraska counties where cancer incidence during 2006-2010 was significantly different (p<.01) from the state:

	Significantly lower ▼	Sign	ificantly higher ▲
County	Primary Sites	County	Primary Sites
Buffalo	Melanoma	Dodge	Prostate
Cedar	Female breast	Douglas	Lung & bronchus
Dakota	Female breast	Saline	Colon & rectum
Dawson	Female breast, lung & bronchus,		
	Non-Hodgkin lymphoma		
Dodge	Melanoma		
Gage	Prostate		
Hall	Melanoma		
Hitchcock	Colon & rectum		
Jefferson	Female breast		
Lancaster	Prostate		
Perkins	Female breast		
Pierce	Female breast		
Richardson	Prostate		
Scotts Bluff	Lung & bronchus		
Stanton	Female breast, lung & bronchus,		
	prostate		
Valley	Female breast		
Wayne	Lung & bronchus		
York	Lung & bronchus		

• Cancer Mortality by County: Below are the Nebraska counties where cancer mortality during 2006-2010 was significantly different (p<.01) from the state:

	Significantly lower ▼	Significantly higher ▲					
County	Primary Sites	County	Primary Sites				
Dawson	Lung & bronchus	Douglas	Lung & bronchus				
Dixon	Lung & bronchus						
Lancaster	Colon & rectum						
Phelps	Lung & bronchus						
Wayne	Lung & bronchus						

• Annual Report Special Topic: The special topic for this report is cancer of the pancreas. Cancer of the pancreas accounted for less than 3% of all invasive cancers diagnosed among Nebraska residents during the past five years (2006-2010), but it is now the fourth leading cause of cancer deaths in Nebraska and the United States. Because most pancreatic cancers are diagnosed when the disease is well-advanced, survival rates are low.

### INTRODUCTION

This publication represents the 24th annual statistical summary of the Nebraska Cancer Registry (NCR) since it began collecting data in 1987. The purpose of this report is to present the registry's most recent data to the citizens of the State of Nebraska. The majority of the data cover cancer diagnoses and cancer deaths that occurred between January 1, 2010 and December 31, 2010, as well as during the past five years (January 1, 2006-December 31, 2010).

The NCR was founded in 1986, when the Nebraska Unicameral authorized funding for a state cancer registry using a portion of funds generated by the state's cigarette tax. The establishment of the registry successfully combined the efforts of many Nebraska physicians, legislators, concerned citizens, and the Nebraska Medical Foundation, all of whom had worked for years toward this goal. The Nebraska Medical Foundation also helped establish the registry with financial assistance. Since 1994, the NCR has received additional funding from the Centers for Disease Control and Prevention (CDC).

The NCR is managed by the Nebraska Department of Health and Human Services (DHHS). However, registry data are collected and edited by the Nebraska Methodist Hospital of Omaha, under contract to the Nebraska Medical Foundation. Analysis of registry data and preparation of the annual statistical report are the responsibility of DHHS.

The purpose of the registry is to gather data that describe how many Nebraska residents are diagnosed with cancer, what types of cancer they have, how far the disease has advanced at the time of diagnosis, what types of treatment they receive, and how long they survive after diagnosis. These data are put to a variety of uses both inside and outside of DHHS. Within the agency, they are monitored from year to year to determine trends that are developing and to see how Nebraska's cancer experience compares to the rest of the nation. They are indispensable for investigating reports of possible cancer clusters. DHHS also uses these data to help plan and evaluate its cancer control programs. Outside of DHHS, the registry has furnished information to many individuals, institutions, and organizations, such as the North American Association of Central Cancer Registries, the University of Nebraska Medical Center, the National Cancer Institute, the American Cancer Society (ACS), and CDC. The NCR also contributes its data to several national cancer incidence databases, which are listed on page 5.

All individual records in the cancer registry are kept in strict confidence as prescribed by both state and federal law. The NCR follows all of the privacy safeguards in the Health Insurance Portability and Accountability Act (HIPAA), although some of the procedural requirements do not apply to the registry.

DHHS welcomes inquiries about cancer from the public for aggregate statistics or general information from the registry. To obtain cancer data or information about the registry not included in this report, please refer to the instructions provided inside the front cover.

An electronic copy of this report is available on the DHHS website at http://dhhs.ne.gov/publichealth/Pages/ced cancer index.aspx

### **METHODOLOGY**

### **Data Collection and Management**

The NCR gathers data on Nebraska residents diagnosed and treated for malignant and in situ tumors. The registry does not include benign tumors (except for benign brain and other nervous system tumors, which became reportable as of January 1, 2004), benign polyps, and basal cell and squamous cell carcinomas of the skin. Information gathered from each case includes the patient's name, address, birth date, race, gender, and Social Security number; date of diagnosis; primary site of the cancer (coded according to the International Classification of Diseases for Oncology, 3<sup>rd</sup> edition [ICD-O-3]); stage of disease at diagnosis; facility where the initial diagnosis was made; basis of staging; method of diagnostic confirmation; and histological type (also classified according to the Follow-up information is gathered periodically on registered cases, and includes the date of last contact with the patient, status of disease, type of additional treatment, quality of survival; and, if death has occurred, the date and cause of death and the status of the cancer at the time of death. The registry collects this information from every hospital in the state, excluding facilities operated by the U.S. Department of Veterans Affairs. The registry also includes Nebraska residents who are diagnosed with and/or treated for cancer out of state, as well as cases diagnosed and/or treated at pathology laboratories, radiation therapy sites, outpatient surgery facilities, physicians' offices, and cases identified from death certificates.

Nebraska cancer mortality data are obtained from death certificates on file with DHHS. Mortality data are available for every Nebraska resident who dies from cancer, whether death occurs in or outside of Nebraska. The mortality data presented in this report are limited to those deaths where cancer is listed as the underlying (i.e., primary) cause of death. Causes of death are coded according to the Tenth Edition of the International Classification of Disease (ICD-10).

The U.S. cancer incidence data presented in this report were prepared by CDC's National Program of Cancer Registries (NPCR). NPCR supports central cancer registries in 45 states (including Nebraska), the District of Columbia, and several U.S. territories, and compiles the data collected by these registries to calculate estimates of U.S. cancer incidence. The mortality data presented in this report were compiled by the National Center for Health Statistics and include all cancer deaths occurring in the United States. Incidence data from NPCR and mortality data from NCHS are available through 2010.

### Confidentiality

All data obtained by the NCR from the medical records of individual patients are held in strict confidence by DHHS. As specified in state statute, researchers may obtain case-specific and/or patient-identifiable information from the registry by submitting a written application that describes how the data will be used for scientific study. In situations where contact with a patient or patient's family is proposed, the applicant must substantiate the need for any such contact and submit approval from an Institutional Review Board. In addition, before any individual's name can be given to a researcher,

the registry will obtain permission from the individual that they are willing to be a research subject. Upon favorable review by DHHS, the applicant must also agree to maintain the confidentiality and security of the data throughout the course of the study, to destroy or return the registry data at the end of the study and to present material to the registry prior to publication to assure that no identifiable information is released.

Aggregate data (i.e., statistical information) from the registry are considered open to the public and are available upon request. Details on how to obtain such data are provided inside the front cover of this report.

### **Quality Assurance**

The NCR and reporting facilities spend a great deal of time and energy to ensure that the information they gather is both accurate and complete, and these efforts have met with great success. For 16 consecutive years (1995-2010), the NCR has met all of the criteria necessary to earn the Gold Standard of data quality awarded by the North American Association of Central Cancer Registries (NAACCR). These criteria include:

- 1) Completeness of case ascertainment—The registry must find at least 95% of the total number of cases that are estimated to have occurred.
- Completeness of information—The proportion of registry cases missing information on age at diagnosis, gender, and county of residence must be no more than 2%, and the proportion missing information on race must be no more than 3%.
- 3) Data accuracy—Error rates based on edit checks of selected data items must be no greater than 1%.
- 4) Timeliness—All data for a single calendar year must be submitted to NAACCR for review no more than 23 months after the year has ended.

Gold standard certification also requires that all cases pass strict edits and that the proportion of registry cases found solely through a review of death certificates must be no more than 3%. Lastly, the proportion of duplicate cases in the registry must be no more than one per 1,000.

Since the NCR has achieved the highest quality standards, its data are now included in several national cancer incidence databases. These databases compile information from cancer registries throughout the United States and Canada that meet the same data quality standards as the NCR. These databases include:

- 1) Cancer in North America (<a href="http://www.naaccr.org">http://www.naaccr.org</a>)
- 2) United States Cancer Statistics (<a href="http://apps.nccd.cdc.gov/uscs">http://apps.nccd.cdc.gov/uscs</a>)
- 3) Cancer Facts & Figures 2010 (http://www.cancer.org/docroot/stt/stt\_0.asp)
- 4) Cancer Control PLANET (http://cancercontrolplanet.cancer.gov/)

#### **Definitions**

Several technical terms are used in presenting the information in this report. The following definitions are provided here to assist the reader.

#### Incidence rate

Incidence rate is the number of new cases of a disease that occur within a specific population during a given time period, divided by the size of the population. For example, if 10 residents of a county with 20,000 residents are diagnosed with colorectal cancer during a single year, then the incidence rate for that county for that year is .0005. Since cancer incidence rates are usually expressed per 100,000 population, this figure is then multiplied by 100,000 to yield a rate of 50 per 100,000 per year.

#### Mortality rate

Mortality rate is the number of deaths that occur within a specific population during a given time period, divided by the size of the population. Like incidence rates, mortality rates are usually expressed as the number of deaths per 100,000 population per year.

### Age-adjusted rate

Age-adjustment is a simple mathematical procedure that makes it possible to compare rates between populations that have different age distributions, and to compare rates within a single population over time. All of the incidence and mortality rates in this report are age-adjusted using the U.S. population in 2000 as the standard. Statewide and national rates are age-adjusted using 19 age groups (<1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85+ years), while county and regional rates are age-adjusted using 11 age groups (<1, 1-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+ years).

### Stage of Disease at Diagnosis

In situ

Tumors diagnosed as in situ consist of malignant cells that are growing in place. In situ tumors are confined to the cell group of origin, and have not penetrated the supporting structure of the organ on which they arose.

#### Malignant

Tumors diagnosed as malignant have spread beyond the cell group of the organ where they began, and may have spread further. The organ where a malignancy began is also known as the primary site. Malignant tumors are subdivided into three categories:

<u>Localized</u>--A localized malignant tumor has not spread beyond the organ where it started.

<u>Regional</u>--A regional malignant tumor has spread beyond the organ where it began, by direct extension to immediately adjacent organs or tissues and/or by spread to regional lymph nodes.

<u>Distant</u>--A distant malignant tumor has spread beyond the primary site to distant parts of the body.

### **Data Analysis**

All of the rates presented in this report were calculated using population estimates developed by the U.S. Census Bureau and released in 2011. Rates for multiple years (2006-2010) (see Tables 1, 2, 5, 6, 9-20) were calculated using population estimates for the years 2006-2010 combined, while rates for 2001-2010 (see Tables 3 and 7) were calculated using population estimates for the years 2001-2010 combined. Incidence and mortality rates that are based on more than one year of data should be interpreted as an average annual rate.

All of the data presented in this report are current through November 13, 2012. However, because some cases diagnosed during or even before 2010 may not yet have been reported to the registry, the incidence data presented in this report should be considered subject to change. In addition, the incidence data reported in previous editions of this report should no longer be considered complete.

Internet users should also be aware that the cancer statistics for Nebraska that are published in this report and those that are posted on non-DHHS websites (see page 5) may differ. Some discrepancies may be the result of differences in the dates at which the data were compiled. As noted above, Nebraska incidence data published in this report include all cases reported to the registry through November 13, 2012; Nebraska data available on the CDC/NPCR website include cases that were reported through November 1, 2011.

With the exception of bladder cancer, all of the site-specific incidence rates in this report were calculated with malignant cases only, to maintain comparability with statistics from the NPCR and other cancer registries throughout the United States. For bladder cancer, incidence rates were calculated with malignant and in situ cases combined. All incidence and mortality rates in this report were calculated per 100,000 population, and were age-adjusted according to the age distribution of the population of the United States in 2000. Statewide rates were also calculated for males and females separately, and for both sexes combined. Rates based on five or fewer events are not presented due to their unreliability. Also, the number of cases for any county with five or fewer cases in a single year is not shown in order to reduce the possibility of identifying a specific person.

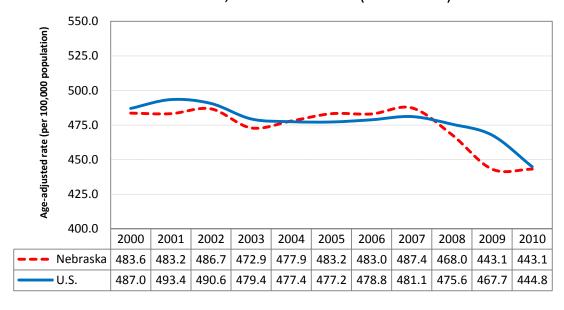
To evaluate the statistical significance of the differences between rates, confidence intervals for rates were calculated using the formula  $CI = r \pm (RC \times SE)$ , where CI = confidence interval, r = rate, RC = 1.96 (for 95% confidence intervals) or 2.58 (for 99% confidence intervals), and SE = standard error. The standard error for a rate was determined by dividing the rate by the square root of the number of events (cancer diagnoses or deaths). A statistically significant difference exists and is indicated in those instances where the confidence intervals of a pair of rates being compared to each other do not intersect.

### **CANCER INCIDENCE IN NEBRASKA**

The Nebraska Cancer Registry recorded 8,887 diagnoses of cancer among Nebraska residents in 2010, an increase from the 8,736 diagnoses recorded in 2009. The 2010 number translates into an incidence rate of 443.1 cases per 100,000 population. By primary site, cancers of the lung, breast, prostate, colon and rectum occurred most frequently, accounting for more than half (51.1%) of all diagnoses. Recent registry experience suggests that as the registry continues to find cases, the final count for 2010 will probably increase by 100 to 300 cases.

Table 1 presents the number and rate of cancers diagnosed among Nebraska residents during 2010 and 2006-2010, for all sites combined and for cancers of specific sites. The most current estimates of U.S. cancer incidence, which cover the years 2005-2009, are also included. Comparison of the most recent state and national incidence rates for the past five years shows significant differences (p<.01) for cancers of the cervix, prostate, stomach, lung, and liver (Nebraska rates lower than the U.S.) and for leukemia and colorectal cancers (Nebraska rates higher than the U.S.). Table 2 presents the number of cancers diagnosed in Nebraska during 2006-2010 by age at diagnosis. Table 3 presents Nebraska incidence data by race and ethnicity for the years 2000-2010. Table 4 presents the number of cancers diagnosed and incidence rates for 2010 and 2006-2010 by county of residence, with comparable Nebraska and U.S. rates included. The graph below presents the annual incidence rates for all cancers for Nebraska and the United States since 2000.

# Cancer (All Sites) Incidence Rates, Nebraska & U.S. (2000-2010)



# **TABLE 1: Cancer Incidence** Number of Cases and Rates, by Selected Primary Site and Gender Nebraska & U.S. (2010 and 2006-2010)

		NEBRASKA 2010					NEBRASKA 2006-2010						U.S. 2006-2010				
Site	Ma No.	ale Rate	Fen No.	nale Rate	To No.	tal Rate	Ma No.	le Rate	Fem No.	ale Rate	Tot No.	tal Rate	Male Rate	Female Rate	Total Rate		
All Sites	4,489	489.1	4,398	410.7	8,887	443.1	23,176	526.2	22,006	420.9	45,184	464.5	541.5	417.9	469.3		
Oral Cavity & Pharynx	141	14.6	91	8.1	232	11.1	729	15.9	366	6.8	1,095	11.1	16.5	6.2	11.0		
Esophagus	72	7.9	20	1.8	92	4.5	375	8.4	109	2.0	484	4.9	8.5	1.9	4.9		
Stomach	76	8.4	50	4.4	126	6.2	339	7.7	186	3.4	525	5.3	9.3	4.6	6.7		
Colon & Rectum (Colorectal)	432	46.7	473	42.0	905	44.3	2,519	57.7	2,485	44.4	5,004	50.6	51.7	39.1	44.7		
Liver & Intrahepatic Bile Duct	77	8.1	32	3.0	109	5.3	340	7.5	130	2.5	470	4.8	10.6	3.6	6.9		
Pancreas	103	11.2	116	10.3	219	10.7	560	12.7	584	10.5	1,144	11.5	13.7	10.7	12.0		
Lung & Bronchus	634	70.0	545	49.9	1,179	58.6	3,239	74.7	2,737	51.2	5,978	61.3	81.3	55.7	66.6		
Melanoma of the Skin	176	19.2	163	16.5	339	17.5	927	21.3	745	15.5	1,672	17.8	24.3	15.5	19.1		
Breast	16	1.8	1,229	116.3	1,245	62.1	53	1.2	6,257	122.3	6,310	65.3	1.4	121.9	65.9		
Uterine Cervix			54	6.2					297	6.8				8.0			

**TABLE 1 (continued): Cancer Incidence** 

		NEBRASKA 2010					NEBRASKA 2006-2010						U.S. 2006-2010			
Site	Ma No.	ale Rate	Fer No.	male Rate	To No.	otal Rate	Ma No.	ale Rate	Fen No.	nale Rate	To No.	tal Rate	Male Rate	Female Rate	Total Rate	
Uterine Corpus & Unspecified			257	24.0					1,321	25.4				23.7		
Ovary			111	10.4					578	11.1				12.2		
Prostate	1,216	129.6					6,424	143.0					146.2			
Kidney & Renal Pelvis	202	21.9	130	12.5	332	16.9	988	21.9	640	12.4	1,628	16.8	21.3	11.2	15.8	
Urinary Bladder	303	35.1	90	7.8	393	19.8	1,481	35.0	483	8.6	1,964	20.0	36.8	9.1	20.9	
Brain & Other Nervous System	74	8.1	66	6.6	140	7.4	359	8.2	311	6.3	670	7.2	7.9	5.7	6.7	
Thyroid	58	6.2	187	20.6	245	13.4	261	5.8	919	20.1	1,180	13.0	6.2	18.2	12.3	
Hodgkin Lymphoma	22	2.4	17	1.9	39	2.2	151	3.4	117	2.6	268	3.0	3.2	2.5	2.8	
Non-Hodgkin Lymphoma	207	22.7	198	18.0	405	20.2	1,020	23.5	943	17.6	1,963	20.2	23.1	16.1	19.2	
Myeloma	61	6.6	50	4.4	111	5.5	309	7.1	236	4.3	545	5.6	7.3	4.8	5.9	
Leukemia	151	16.9	117	10.6	268	13.4	752	17.3	587	10.9	1,339	13.7	16.2	9.9	12.6	

Total rates are per 100,000 population and are age-adjusted to the 2000 U.S. population Gender-specific rates are per 100,000 male or female population and are age-adjusted to the 2000 U.S. population

# TABLE 2: Cancer Incidence Number of Cases and Percentage Distribution, by Selected Primary Site and Age at Diagnosis Nebraska (2006-2010)

	<u>0-17 Yr</u>	<u>'S.</u>	18-44 Yrs.		45-64 Yrs.		65+ Yrs		<b>TOTAL</b>	
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	<u>Number</u>	<u>%</u>
All Sites	378	8.0	3,216	7.1	15,737	34.8	25,853	57.2	45,184	100.0
Oral Cavity & Pharynx	4	0.4	72	6.6	496	45.3	523	47.8	1,095	100.0
Esophagus	0	0.0	11	2.3	173	35.7	300	62.0	484	100.0
Stomach	1	0.2	27	5.1	171	32.6	326	62.1	525	100.0
Colon & Rectum (Colorectal)	3	0.1	191	3.8	1,399	28.0	3,411	68.2	5,004	100.0
Liver & Intrahepatic Bile Duct	6	1.3	22	4.7	201	42.8	241	51.3	470	100.0
Pancreas	0	0.0	12	1.0	325	28.4	807	70.5	1,144	100.0
Lung & Bronchus	2	0.0	87	1.5	1,708	28.6	4,181	69.9	5,978	100.0
Melanoma of the Skin	5	0.3	341	20.4	645	38.6	681	40.7	1,672	100.0
Female Breast	0	0.0	600	9.6	2,789	44.6	2,868	45.8	6,257	100.0
Uterine Cervix	1	0.3	138	46.5	111	37.4	47	15.8	297	100.0
Uterine Corpus & Unspecified	0	0.0	87	6.6	699	52.9	535	40.5	1,321	100.0
Ovary	2	0.3	55	9.5	257	44.5	264	45.7	578	100.0
Prostate	0	0.0	18	0.3	2,460	38.3	3,946	61.4	6,424	100.0
Kidney & Renal Pelvis	24	1.5	119	7.3	669	41.1	816	50.1	1,628	100.0
Urinary Bladder	0	0.0	30	1.5	435	22.1	1,499	76.3	1,964	100.0
Brain & Other Nervous System	87	13.0	124	18.5	196	29.2	263	39.3	670	100.0
Thyroid	8	0.7	393	33.3	554	46.9	225	19.1	1,180	100.0
Hodgkin Lymphoma	32	11.9	136	50.7	54	20.1	46	17.2	268	100.0
Non-Hodgkin Lymphoma	30	1.5	140	7.1	621	31.6	1,172	59.7	1,963	100.0
Myeloma	0	0.0	20	3.7	165	30.3	360	66.1	545	100.0
Leukemia	92	6.9	106	7.9	356	26.6	785	58.6	1,339	100.0

NOTE: Due to rounding, percentages may not sum to 100.0.

TABLE 3: Cancer Incidence
Number of Cases and Rates, All Sites and Top 10 Primary Sites, by Race and Ethnicity
Nebraska (2001-2010)

		White		Africa	ın-American		<u>N</u> ativ	e American		Asian/Pa	acific Island	er	<u>Hispanic</u>			
	<u>Site</u>	Number	Rate	Site	Number	Rate	Site	Number	Rate	<u>Site</u>	Number	Rate	<u>Site</u>	Number	<u>Rate</u>	
	All Sites	84,299	468.7	All Sites	2,566	511.6	All Sites	339	359.3	All Sites	475	288.1	All Sites	1,430	284.2	
Rank																
1	Female Breast	12,008	126.9	Prostate	445	200.6	Lung & Bronchus	48	66.6	Lung & Bronchus	68	43.6	Female Breast	171	59.7	
2	Prostate	11,988	146.6	Lung & Bronchus	405	87.1	Female Breast	41	65.4	Colon & Rectum	64	48.1	Prostate	145	77.9	
3	Lung & Bronchus	11,310	62.6	Female Breast	337	117.7	Colon & Rectum	40	43.4	Female Breast	62	58.8	Colon & Rectum	128	30.9	
4	Colon & Rectum	9,863	53.5	Colon & Rectum	296	65.2	Kidney & Renal Pelvis	33	28.8	Prostate	35	63.9	Lung & Bronchus	117	33.7	
5	Urinary Bladder	3,878	21.1	Kidney & Renal Pelvis	113	22.8	Prostate	25	71.6	Liver & Intrahepatic Bile Duct	32	18.6	Kidney & Renal Pelvis	78	14.0	
6	Non- Hodgkin Lymphoma	3,694	20.5	Non- Hodgkin Lymphoma	77	13.9	Non- Hodgkin Lymphoma	14	11.8	Thyroid	25	8.3	Thyroid	71	8.8	
7	Melanoma	2,783	16.1	Pancreas	74	16.0	Liver & Intrahepatic Bile Duct	12	13.6	Non- Hodgkin Lymphoma	24	12.2	Leukemia	67	7.8	
8	Kidney & Renal Pelvis	2,737	15.3	Liver & Intrahepatic Bile Duct	68	11.6	Oral Cavity & Pharynx	12	12.0	Oral Cavity & Pharynx	19	11.8	Non- Hodgkin Lymphoma	64	11.5	
9	Uterine Corpus & Unspecified	2,558	26.9	Urinary Bladder	61	13.6	Leukemia	11	10.0	Pancreas	16	11.1	Stomach	51	11.3	
10	Leukemia	2,524	14.0	Myeloma	57	12.0	Uterine Corpus & Unspecified	8	14.3	Cervix	14	12.6	Liver & Intrahepatic Bile Duct	49	12.5	

Rates are per 100,000 population, excluding gender-specific sites (prostate, female breast, ovary), which are per 100,000 male or female population. All rates are age-adjusted to the 2000 U.S. population.

# TABLE 4: Cancer (All Sites) Incidence Number of Cases and Rates, by County of Residence Nebraska & U.S. (2010 and 2006-2010)

	20	<u>)10</u>	2006-	2010
	# Cases	Rate	# Cases	Rate
U.S.	1,392,876	444.8	7,074,447	469.3
NEBRASKA	8,887	443.1	45,184	464.5
<u>COUNTY</u>				
ADAMS	172	463.0	884	484.9
ANTELOPE	48	468.4	235	470.6
ARTHUR	*	*	9	259.8∇
BANNER	*	*	21	449.0
BLAINE	*	*	11	381.9
BOONE	38	465.4	200	489.9
BOX BUTTE	62	439.5	295	416.3
BOYD	13	439.5	61	371.0
BROWN	19	306.5	107	401.1
BUFFALO	204	440.8	1047	467.8
BURT	53	483.7	256	453.3
BUTLER	46	391.2	231	400.0∇
CASS	122	409.9	707	497.9
CEDAR	40	284.8∇	205	308.2▼
CHASE	31	513.2	147	483.3
CHERRY CHEYENNE	27 61	295.0∇ 514.5	178 284	419.0 457.9
CLAY	49	532.5	234	518.6
COLFAX	49 54	475.6	254 254	443.6
CUMING	50	371.5	264	403.8∇
CUSTER	59	394.5	358	440.4
DAKOTA	80	400.7	425	425.3
DAWES	33	291.1 ▼	204	392.1 ▽
DAWSON	102	377.1	540	412.3▼
DEUEL	12	376.2	68	408.5
DIXON	46	552.7	182	452.2
DODGE	218	439.0	1210	507.1△
DOUGLAS	2,292	468.1	11,696	495.6 ▲
DUNDY	15	570.7	71	455.8
FILLMORE	38	485.8	217	490.2
FRANKLIN	15	289.2	97	366.1 ▽
FRONTIER	17	458.6	102	544.7
FURNAS	34	430.8	192	476.4
GAGE	139	445.4	722	461.4
GARDEN	21	506.2	77	436.5
GARFIELD	19	481.3	86	475.8 562.4
GOSPER GRANT	21 *	602.2	89 25	563.1 683.8
GREELEY	11	274.2	82 82	405.5
HALL	293	456.0	1,509	491.0
HAMILTON	41	347.9	238	417.9
HARLAN	33	575.2	145	504.1
HAYES	8	525.4	24	356.2
HITCHCOCK	14	269.6∇	108	446.8
HOLT	67	450.6	327	431.0
HOOKER	7	520.0	32	479.3
HOWARD	37	415.8	213	498.2
JEFFERSON	49	392.9	242	399.7∇

TABLE 4 (continued): Cancer (All Sites) Incidence

		<u>2010</u>	2006	<u>-2010</u>
	# Cases	Rate	# Cases	Rate
COUNTY			<u></u>	
JOHNSON	38	541.3	165	462.1
KEARNEY	49	540.4	178	405.5
KEITH	60	491.8	240	390.7▼
KEYA PAHA	*	*	29	416.9
KIMBALL	26	457.7	126	452.0
KNOX	59	472.0	322	487.8
LANCASTER	1,185	434.6	5,931	455.1
LINCOLN	207	465.7	1,017	470.9
LOGAN	8	684.8	27	517.3
LOUP	8	736.9	39	810.2▲
McPHERSON	*	*	16	438.3
MADISON	190	468.4	997	507.4△
MERRICK	47	457.0	229	441.1
MORRILL	30	408.1	139	409.3
NANCE	28	510.9	113	404.8
NEMAHA	36	376.8	215	448.6
NUCKOLLS	27	369.3	162	425.7
OTOE	94	444.9	437	423.2
PAWNEE	18	347.4	99	405.5
PERKINS	23	452.9	89	397.0
PHELPS	46	412.5	247	402.5∇
PIERCE	50	502.4	216	460.2
PLATTE	163	427.1	803	444.9
POLK	33	412.7	175	440.0
RED WILLOW	65	427.2	356	467.7
RICHARDSON	59	472.5	298	464.1
ROCK	11	424.8	66	583.9
SALINE	73	456.5	415	515.2
SARPY	598	459.9	2,944	489.6△
SAUNDERS	117	456.8	572	455.2
SCOTTSBLUFF	215	469.1	1,029	446.2
SEWARD	93	471.3	449	467.7
SHERIDAN	29	338.4	155	376.3▼
SHERMAN	25	465.1	123	486.1
SIOUX	*	*	19	177.8▼
STANTON	13	190.6 ▼	71	206.9▼
THAYER	37	399.2	208	446.7
THOMAS	*	*	17	302.1∇
THURSTON	19	279.0∇	145	438.9
VALLEY	19	240.2▼	125	344.6▼
WASHINGTON	102	418.6	485	425.0
WAYNE	42	415.3	216	433.8
WEBSTER	35	571.5	167	540.0_
WHEELER	*	*	17	291.1∇
YORK	73	395.2	385	424.9

<sup>\*</sup>Number and rate for single years are not shown if based on five or fewer cases Rates are per 100,000 population and are age-adjusted to the 2000 U.S. population

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

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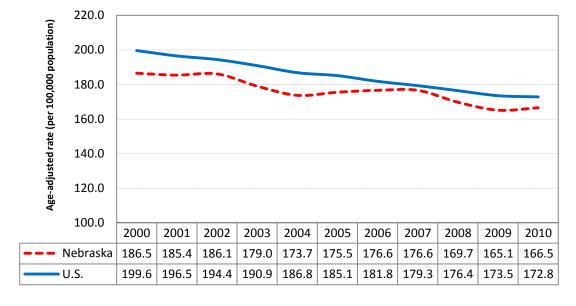
### **CANCER MORTALITY IN NEBRASKA**

In 2010, 3,437 Nebraska residents died from cancer, a number that translates into a rate of 166.5 cancer deaths per 100,000 population. These figures represent an increase from the state's 2009 figures of 3,336 (cancer deaths) and 165.1 (cancer mortality rate). For the second consecutive year, cancer was the leading cause of mortality among Nebraska residents in 2010, surpassing heart disease by 93 deaths. By primary site, cancers of the lung, breast, prostate, colon and rectum accounted for just under half (49.0%) of Nebraska's cancer deaths in 2010.

Table 5 presents the number and rate of cancer deaths that occurred among Nebraska residents during 2010 and 2006-2010, for all sites combined and for specific sites. The most recent U.S. cancer mortality rates, which cover the years 2005 through 2009, are also included. Comparison of the most recent state and national mortality rates for the past five years shows significant differences (p<.01) for cancers of the stomach, liver, lung, female breast, and cervix (Nebraska rates lower than the U.S.) and for colorectal cancer and cancers of the brain and central nervous system (Nebraska rates higher than the U.S.). Table 6 presents the number of Nebraska cancer deaths during 2006-2010 by age at death. Table 7 presents Nebraska cancer mortality data by race and ethnicity for the years 2001-2010. Table 8 presents the number of cancer deaths and mortality rates for 2010 and 2006-2010 by county of residence, with comparable state and U.S. rates included. The graph below shows the annual mortality rates for cancer for Nebraska and the U.S. since 2000.

# **Cancer (All Sites)**

Mortality Rates, Nebraska & U.S. (2000-2010)



# TABLE 5: Cancer Mortality Number of Deaths and Rates, by Selected Primary Site and Gender Nebraska & U.S. (2010 and 2006-2010)

	NEBRASKA 2010					NEBRASKA 2006-2010						U.S. 2006-2010			
Site	Ma No.	ale Rate	Fen No.	nale Rate	To No.	tal Rate	Ma No.	ale Rate	Fen No.	nale Rate	Tot No.	al Rate	Male Rate	Female Rate	Total Rate
All Sites	1,792	200.0	1,645	142.2	3,437	166.5	8,923	208.3	8,130	143.8	17,053	170.6	215.1	150.1	176.7
Oral Cavity & Pharynx	39	4.0	20	1.7	59	2.8	134	3.0	93	1.6	227	2.3	3.8	1.4	2.5
Esophagus	89	9.7	18	1.6	107	5.3	357	8.0	87	1.5	444	4.5	7.6	1.6	4.3
Stomach	29	3.1	21	1.8	50	2.4	154	3.5	100	1.7	254	2.5	4.9	2.6	3.5
Colon & Rectum (Colorectal)	180	20.0	178	14.7	358	17.1	918	21.3	895	14.9	1,813	17.8	19.6	13.9	16.4
Liver & Intrahepatic Bile Duct	68	7.2	36	3.3	104	5.1	275	6.2	144	2.6	419	4.2	8.3	3.4	5.6
Pancreas	104	11.2	105	8.9	209	10.1	525	12.0	554	9.7	1,079	10.8	12.5	9.6	10.9
Lung & Bronchus	525	58.5	403	36.3	928	45.9	2,588	60.3	1,949	35.5	4,537	46.2	63.3	39.2	49.5
Melanoma of the Skin	34	3.7	20	1.7	54	2.6	175	4.0	115	2.2	290	2.9	4.1	1.7	2.7
Breast	5	0.5	225	19.2	230	10.9	10	0.2	1,115	20.1	1,125	11.2	0.3	22.7	12.7
Uterine Cervix			24	2.6					87	1.8				2.4	

**TABLE 5 (continued): Cancer Mortality** 

	NEBRASKA 2010						NEBRASKA 2006-2010						U.S. 2006-2010				
Site	M No.	ale Rate	Fer No.	nale Rate	To No.	otal Rate	Ma No.	ale Rate	Fer No.	nale Rate	To No.	tal Rate	Male Rate	Female Rate	Total Rate		
Uterine Corpus & Unspecified			53	4.5					265	4.7				4.3			
Ovary			81	7.3					423	7.7				8.1			
Prostate	167	20.0					931	22.9					23.0				
Kidney & Renal Pelvis	58	6.2	28	2.3	86	4.1	262	6.0	161	2.8	423	4.3	5.8	2.6	4.0		
Urinary Bladder	61	7.2	29	2.4	90	4.3	284	6.9	130	2.1	414	4.0	7.7	2.2	4.4		
Brain & Other Nervous System	45	5.0	43	3.8	88	4.4	255	5.8	218	4.1	473	5.0	5.2	3.5	4.3		
Thyroid	5	0.5	5	0.5	10	0.5	22	0.5	21	0.4	43	0.4	0.5	0.5	0.5		
Hodgkin Lymphoma	7	0.9	1	0.1	8	0.5	29	0.7	13	0.2	42	0.4	0.5	0.3	0.4		
Non-Hodgkin Lymphoma	65	7.2	78	6.4	143	6.9	358	8.4	341	5.7	699	6.9	8.2	5.1	6.4		
Myeloma	32	3.6	38	3.1	70	3.3	174	4.1	163	2.8	337	3.3	4.3	2.7	3.4		
Leukemia	63	7.2	66	5.8	129	6.3	391	9.3	298	5.1	689	6.9	9.5	5.3	7.1		

Total rates are per 100,000 population and are age-adjusted to the 2000 U.S. population Gender-specific rates are per 100,000 male or female population and are age-adjusted to the 2000 U.S. population

# TABLE 6: Cancer Mortality Number of Deaths and Percentage Distribution, by Selected Primary Site and Age at Death Nebraska (2006-2010)

	<u>0-17 Yı</u>	<u>'S.</u>	<u>18-44 Y</u>	rs.	45-64 Y	rs.	65+ Yı	<u>'s</u>	TOTA	<u>\L</u>
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
All Sites	47	0.3	423	2.5	4,193	24.6	12,390	72.7	17,053	100.0
Oral Cavity & Pharynx	0	0.0	9	4.0	80	35.2	138	60.8	227	100.0
Esophagus	0	0.0	6	1.4	149	33.6	289	65.1	444	100.0
Stomach	0	0.0	9	3.5	70	27.6	175	68.9	254	100.0
Colon & Rectum (Colorectal)	0	0.0	26	1.4	404	22.3	1,383	76.3	1,813	100.0
Liver & Intrahepatic Bile Duct	2	0.5	12	2.9	135	32.2	270	64.4	419	100.0
Pancreas	0	0.0	5	0.5	254	23.5	820	76.0	1,079	100.0
Lung & Bronchus	1	<0.1	44	1.0	1,160	25.6	3,332	73.4	4,537	100.0
Melanoma of the Skin	0	0.0	27	9.3	100	34.5	163	56.2	290	100.0
Female Breast	0	0.0	55	4.9	355	31.6	715	63.6	1,125	100.0
Uterine Cervix	0	0.0	21	24.1	39	44.8	27	31.0	87	100.0
Uterine Corpus & Unspecified	0	0.0	8	3.0	59	22.3	198	74.7	265	100.0
Ovary	0	0.0	12	2.8	135	31.9	276	65.2	423	100.0
Prostate	0	0.0	1	0.1	75	8.1	855	91.8	931	100.0
Kidney & Renal Pelvis	2	0.5	9	2.1	119	28.1	293	69.3	423	100.0
Urinary Bladder	0	0.0	1	0.2	49	11.8	364	87.9	414	100.0
Brain & Other Nervous System	16	3.4	56	11.8	163	34.5	238	50.3	473	100.0
Thyroid	0	0.0	1	2.3	12	27.9	30	69.8	43	100.0
Hodgkin Lymphoma	0	0.0	3	7.1	15	35.7	24	57.1	42	100.0
Non-Hodgkin Lymphoma	0	0.0	14	2.0	128	18.3	557	79.7	699	100.0
Myeloma	0	0.0	2	0.6	73	21.7	262	77.7	337	100.0
Leukemia	12	1.7	35	5.1	127	18.4	515	74.7	689	100.0

NOTE: Due to rounding, percentages may not sum to 100.0.

# **TABLE 7: Cancer Mortality** Number of Deaths and Rates, All Sites and Top 10 Primary Sites, by Race and Ethnicity Nebraska (2001-2010)

	<u>White</u>		African-American		Native American			Asian/Pacific Islander		<u>Hispanic</u>					
	<u>Site</u>	Number	<u>Rate</u>	<u>Site</u>	Number	<u>Rate</u>	<u>Site</u>	Number	<u>Rate</u>	<u>Site</u>	Number	<u>Rate</u>	<u>Site</u>	Number	<u>Rate</u>
	All Sites	32,377	173.9	All Sites	1,100	244.1	All Sites	150	192.5	All Sites	155	111.3	All Sites	443	114.5
<u>Rank</u>															
1	Lung & Bronchus	8,611	47.2	Lung & Bronchus	316	71.2	Lung & Bronchus	46	66.7	Lung & Bronchus	42	30.4	Lung & Bronchus	73	21.3
2	Colon & Rectum	3,550	18.6	Colon & Rectum	126	30.5	Colon & Rectum	12	11.5	Liver	21	10.6	Colon & Rectum	36	10.0
3	Female Breast	2,259	21.8	Female Breast	92	33.0	Female Breast	11	21.7	Colon & Rectum	16	12.7	Female Breast	34	15.5
4	Pancreas	1,864	10.0	Prostate	65	44.1	Ovary	9	18.1	Pancreas	12	9.6	Liver	33	9.7
5	Prostate	1,791	23.8	Pancreas	64	14.5	Kidney & Renal Pelvis	9	10.4	Female Breast	9	9.1	Stomach	25	6.1
6	Leukemia	1,364	7.3	Liver	47	8.3	Pancreas	6	6.2	Non- Hodgkin Lymphoma	9	8.0	Prostate	22	19.3
7	Non- Hodgkin Lymphoma	1,363	7.2	Myeloma	34	8.3	Esophagus	5	*	Stomach	6	2.5	Pancreas	21	4.2
8	Brain	889	5.0	Leukemia	29	6.1	Liver	5	*	Kidney & Renal Pelvis	5	*	Leukemia	21	6.5
9	Ovary	847	8.3	Esophagus	27	5.5	Myeloma	5	*	Brain	5	*	Kidney & Renal Pelvis	19	3.9
10	Kidney & Renal Pelvis	830	4.5	Stomach	26	5.5							Non- Hodgkin Lymphoma	16	4.3

Rates are per 100,000 population, excluding gender-specific sites (prostate, female breast, ovary), which are per 100,000 male or female population. All rates are age-adjusted to the 2000 U.S. population.
\*Rate is not shown if based on five or fewer deaths

# TABLE 8: Cancer (All Sites) Mortality Number of Deaths and Rates, by County of Residence Nebraska & U.S. (2010 and 2006-2010)

	20	<u>)10</u>	2006-2010			
	# Deaths	Rate	# Deaths	Rate		
U.S.	574,743	172.8	2,830,603	176.7		
NEBRASKA	3,437	166.5	17,053	170.6		
COUNTY ADAMS ANTELOPE ARTHUR	55 19 *	141.9 167.7 *	315 81 5	163.0 147.7 ***		
BANNER	*	*	7	144.4		
BLAINE BOONE BOX BUTTE BOYD	* 12 21 *	113.3 142.3 *	7 88 109 25	185.3 187.5 149.3 115.0∇		
BROWN	7	120.9	44	149.2		
BUFFALO BURT BUTLER	57 20 18	126.1∇ 189.4 131.9	406 119 81	181.4 197.9 128.7 ▼		
CASS	73	239.4△	289	200.2△		
CEDAR CHASE CHERRY	25 8 12	152.4 119.6 126.6	97 45 72	131.9 <b>▼</b> 134.2 159.2		
CHEYENNE	25	188.0	109	162.5		
CLAY	18	184.6	99	206.1		
COLFAX CUMING	20 15	167.1 107.5	106 104	171.7 144.8		
CUSTER	28	150.4	150	163.7		
DAKOTA	37	190.1	166	166.4		
DAWES	27	220.7	107	185.7		
DAWSON DEUEL	36	132.9	201 23	149.4 140.4		
DIXON DODGE	21 96	220.0 186.5	76 478	178.2 184.5		
DOUGLAS DUNDY	865 *	181.5	4,257 32	184.4 <b>▲</b> 166.1		
FILLMORE	15	126.6	94	171.7		
FRANKLIN FRONTIER	7	122.0	32	102.3▼		
FURNAS	6 11	152.2 122.8	41 65	204.2 147.0		
GAGE	67	201.6	317	185.3		
GARDEN	7	152.5	27	147.3		
GARFIELD	8	208.5	24	118.1∇		
GOSPER	9	277.4	25	161.0		
GRANT			7 37	190.1		
GREELEY HALL	8 112	170.6 167.9	57 554	159.8 174.0		
HAMILTON	19	161.8	88	144.6		
HARLAN	14	210.3	67	208.6		
HAYES	0	0.0	12	177.8		
HITCHCOCK	11	217.2	43	167.1		
HOLT	28	169.6 *	139	165.2		
HOOKER HOWARD	14	151.6	14 86	169.4 186.8		
JEFFERSON	17	142.6	111	159.2		

**TABLE 8 (continued): Cancer Mortality** 

	20	<u>)10</u>	2006	<u>2006-2010</u>			
	# Deaths	Rate	# Deaths	Rate			
COUNTY			·				
JOHNSON	10	125.8	55	139.6			
KEARNEY	16	160.1	59	124.5▼			
KEITH	25	189.9	115	180.2			
KEYA PAHA	*	**	13	163.5			
KIMBALL	10	180.1	60	207.5			
KNOX	28	203.7	138	190.6			
LANCASTER	421	155.5	2,050	159.1 ▽			
LINCOLN	71	154.8	374	167.6			
LOGAN	0	0.0	4	***			
LOUP	0	0.0	6	118.3			
McPHERSON	*	*	8	202.4			
MADISON	78	182.7	373	183.7			
MERRICK	15	144.3	90	167.4			
MORRILL	6	91.8	42	115.6▼			
NANCE	11	184.7	52	178.3			
NEMAHA	15	145.5	84	167.6			
NUCKOLLS	13	147.8	71	147.7			
OTOE	33	146.0	182	161.1			
PAWNEE	6	108.3	44	164.5			
PERKINS	8	177.5	40	158.9			
PHELPS	20	135.5	100	144.4			
PIERCE	21	227.5	90	185.1			
PLATTE	54	136.4	280	152.2			
POLK	16	169.4	62	144.7			
RED WILLOW	32	186.1	150	181.2			
RICHARDSON	29	204.2	143	190.1			
ROCK	*	*	18	127.6			
SALINE	28	154.1	146	169.5			
SARPY	211	175.5	942	173.8			
SAUNDERS	61	232.1△	262	207.6 ▲			
SCOTTS BLUFF	89	179.0	395	161.6			
SEWARD	38	179.8	187	182.2			
SHERIDAN	13	145.8	72	150.4			
SHERMAN	14	238.0	61	235.0△			
SIOUX	*	*	12	114.6			
STANTON	13	193.7	51	144.4			
THAYER	14	116.8	86	153.6			
THOMAS	0	0.0	**	***			
THURSTON	10	140.8	72	212.6			
VALLEY	13	169.4	72	183.8			
WASHINGTON	39	163.9	203	175.9			
WAYNE	14	144.1	70	132.6			
WEBSTER	15	202.5	60	177.0			
WHEELER	*	*	8	142.5			
YORK	32	155.3	169	167.3			

<sup>\*</sup>Number and rate for single years are not shown if based on five or fewer deaths

<sup>\*\*</sup>Number for combined years is not shown if based on fewer than three deaths

<sup>\*\*\*</sup>Rate for combined years is not shown if based on five or fewer deaths
Rates are per 100,000 population and are age-adjusted to the 2000 U.S. population

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

### INCIDENCE AND MORTALITY FOR SELECTED PRIMARY SITES

### **Lung and Bronchus**

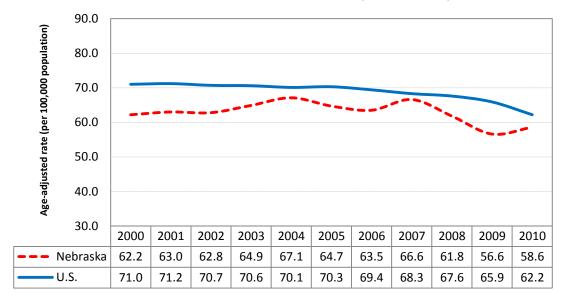
Although lung cancer was only the third most frequently diagnosed cancer among Nebraska residents in 2010, it was the year's leading cause of cancer mortality, accounting for more than 25% of the state's cancer deaths. During the past five years (2006-2010), lung cancer has averaged about 1,200 diagnoses and 900 deaths in Nebraska per year. Although lung cancer is more likely to strike men than women, there has been a 30% drop in the rate of lung cancer deaths among Nebraska men since 1990, but a slight increase in the rate for Nebraska women. The large number of lung cancer deaths is due to the small number of cases that are detected at an early stage: as a result, the 5-year survival rate for people who are diagnosed with lung cancer is less than 20%.

Cigarette smoking is the major risk factor for lung cancer and causes about 85% of lung cancer deaths. People who smoke two or more packs of cigarettes per day are 15 to 25 times more likely to die from lung cancer than non-smokers. Quitting smoking reduces the risk of lung cancer, although it takes 10-15 years for an ex-smoker's risk to drop to the level of a lifelong non-smoker. People who do not smoke but who breathe the smoke of others may also be at a higher risk for lung cancer. Exposure to radon (a radioactive gas) and asbestos are lung cancer risk factors for both smokers and non-smokers, although people who smoke are at far greater risk than those who do not.

Incidence and mortality statistics by county of residence for cancers of the lung and bronchus are presented in Appendix I (Table 9).

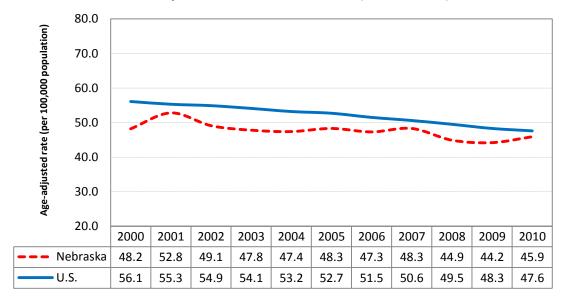
# **Lung and Bronchus Cancer**

Incidence Rates, Nebraska & U.S. (2000-2010)



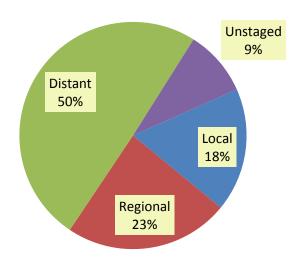
## **Lung and Bronchus Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



# **Lung and Bronchus Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



### **Breast (Female only)**

Breast cancer is the most common type of cancer among women and the second most frequent cause of female cancer deaths. Between 2006 and 2010, 6,257 Nebraska women were diagnosed with invasive breast cancer (and another 1,415 were diagnosed with in situ breast cancer) and 1,115 women died from breast cancer. Since 1990, the rate of breast cancer deaths in Nebraska and the U.S. has declined significantly. Recent declines in the rate of breast cancer diagnoses have been attributed to the decreasing use of post-menopausal hormone replacement therapy.

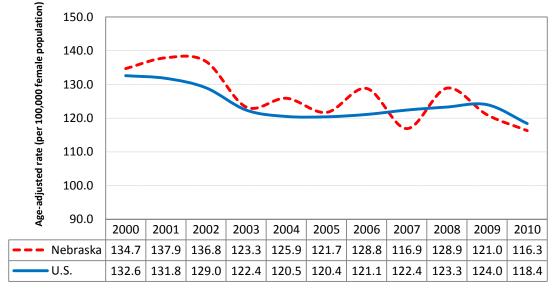
Age is an important risk factor for breast cancer, with 80% of all cases occurring among women age 50 and older. Other risk factors include genetic mutations, a personal or family history of breast cancer, some forms of benign breast disease, early menstruation, late menopause, never having children or having a first child after age 30, and for post-menopausal women, obesity and long-term hormone replacement therapy.

Screening for breast cancer is known to save lives, although opinions vary on how and when to screen. The American Cancer Society (ACS) recommends that women aged 40 and older have an annual mammogram, but the U.S. Preventive Services Task Force (USPSTF) recommends mammography only for women aged 50-74 on an every other year schedule. The ACS guidelines also include a clinical breast exam every three years for women in their 20s and 30s and every year for women 40 and older, while the USPSTF does not include clinical breast exams in its recommendations. For women 30 years and older who have an increased risk of breast cancer, the ACS recommends annual magnetic resonance imaging (MRI) as an additional screening test. Breast self-exam is also another preventive method for women beginning in their 20s.

Incidence and mortality statistics by county of residence for cancer of the female breast are presented in Appendix II (Table 10).

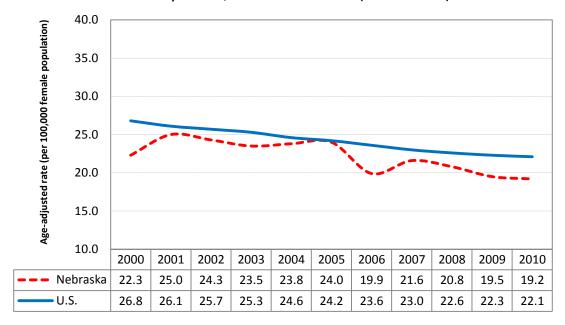
### Female Breast Cancer

Incidence Rates, Nebraska & U.S. (2000-2010)



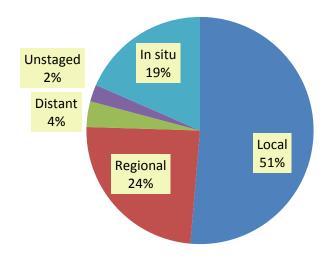
### **Female Breast Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



### **Female Breast Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



### **Colon and Rectum (Colorectal)**

In 2010, colorectal cancer was the fourth most frequently diagnosed cancer among Nebraska residents, accounting for 905 new cases. It was also the second leading cause of cancer mortality in the state, accounting for 358 deaths.

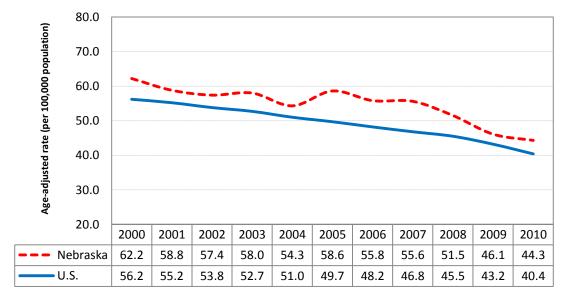
The risk of developing colorectal cancer increases with age. More than two-thirds of all colorectal cancer cases that occurred in Nebraska during 2006-2010 were 65 or older at diagnosis. Other risk factors include a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, and certain hereditary colorectal cancer syndromes. Modifiable risk factors include physical inactivity, obesity, smoking, a high-fat diet (especially fat from animal sources), and heavy alcohol use.

Screening for asymptomatic polyps and tumors is known to prevent new colorectal cancer cases and deaths. The USPSTF recommends that people between the ages of 50 and 75 follow one of these schedules: 1) an annual high-sensitivity fecal occult blood test (FOBT), 2) sigmoidoscopy every 5 years combined with a high-sensitivity FOBT every 3 years, or 3) colonoscopy every 10 years. People at increased risk (i.e., a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, or a family history of hereditary colorectal cancer syndromes) may be advised to begin screening before age 50 and/or be screened more often. Other screening tests that are included in the most recent ACS guidelines include double contrast barium enema (every 5 years), virtual colonoscopy (every 5 years), and yearly fecal immunochemical test (FIT) (every year).

Incidence and mortality statistics by county of residence for cancers of the colon and rectum are presented in Appendix III (Table 11).

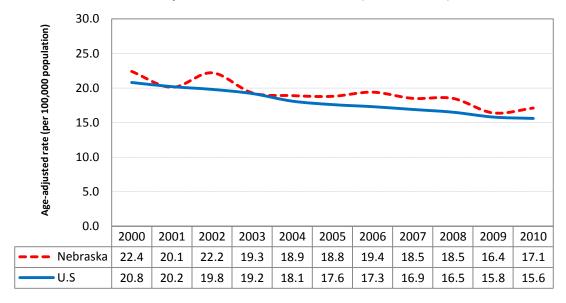
### **Colon and Rectum (Colorectal) Cancer**

Incidence Rates, Nebraska & U.S. (2000-2010)



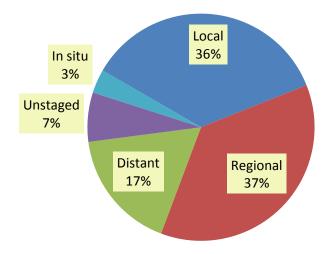
## **Colon and Rectum (Colorectal) Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



## **Colon and Rectum (Colorectal) Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



#### **Prostate**

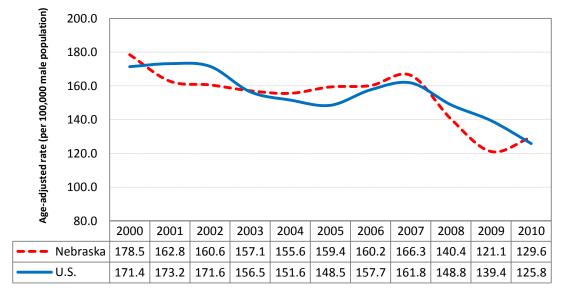
With 1,216 diagnoses in 2010, prostate cancer was the most common cancer among Nebraska men, accounting for just over 25% of all new cancers. During the past five years (2006-2010), it has also been the second leading cause of cancer deaths among Nebraska men, accounting for 931 deaths. Since the mid-1990s, prostate cancer death rates have declined substantially, both in Nebraska and throughout the United States.

At present, little is known about what causes prostate cancer. However, it is known that an individual's risk increases with age (over 60% of Nebraska men diagnosed with prostate cancer during 2006-2010 were 65 or older) and is significantly greater among African-Americans. During the past decade (2001-2010), the incidence of prostate cancer among African-American men in Nebraska has been 40% higher than among whites. Men with a close relative (father, brother, or son) who have had prostate cancer, especially at a younger age, are also at increased risk.

Current ACS guidelines for prostate cancer screening recommend that health care providers begin to discuss the benefits and limitations of screening and treatment with men who are 50 years old, have a life expectancy of at least 10 years, and have an average risk of developing prostate cancer. This discussion should begin at age 45 for men at high risk (African-Americans and men with a father, brother, or son diagnosed with prostate cancer before age 65) and at age 40 for men of higher risk (men with several first-degree relatives diagnosed before age 65). For men who choose to be screened, the ACS recommends a prostate-specific antigen (PSA) test every year (less frequently depending on results) and an optional digital rectal exam.

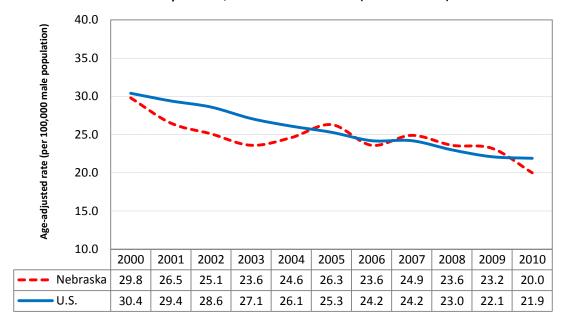
Incidence and mortality statistics by county of residence for cancer of the prostate are presented in Appendix IV (Table 12).

**Prostate Cancer**Incidence Rates, Nebraska & U.S. (2000-2010)



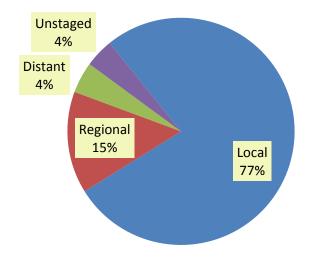
### **Prostate Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



**Prostate Cancer** 

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



### **Urinary Bladder**

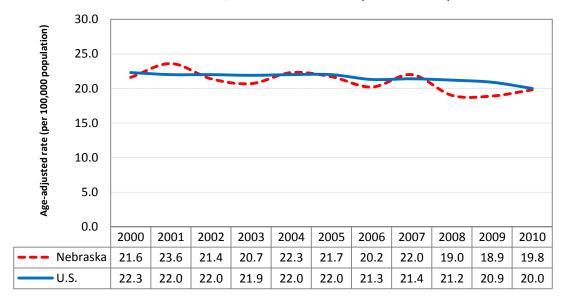
Between 2006 and 2010, 1,964 Nebraska residents were diagnosed with bladder cancer. Bladder cancer occurs much more frequently among men than women (by about a 3-to-1 ratio), and it now ranks as the fourth most common site of cancer diagnoses among Nebraska men. However, deaths from bladder cancer occur far less often (414 Nebraska residents died from it during 2006-2010), which is the result of a high percentage of early-stage diagnoses and the existence of effective treatments. Survival prospects have improved considerably in recent decades, the most current national data show that the 5-year survival rate for all bladder cancer patients to be nearly 80%.

Cigarette smoking is the most important known risk factor for bladder cancer. Smokers develop bladder cancer two to three times more often than non-smokers, and about one-third of all cases are attributable to smoking. Risk factors also include occupational exposures to certain chemicals used to make dyes (benzidine and beta-naphthylamine), as well as working in the manufacture of rubber and leather. Like most cancers, the risk of bladder cancer increases with age: more than 75% of the cases that occurred in Nebraska during 2006-2010 were at least 65 years old when diagnosed.

Incidence and mortality statistics by county of residence for cancer of the urinary bladder are presented in Appendix V (Table 13).

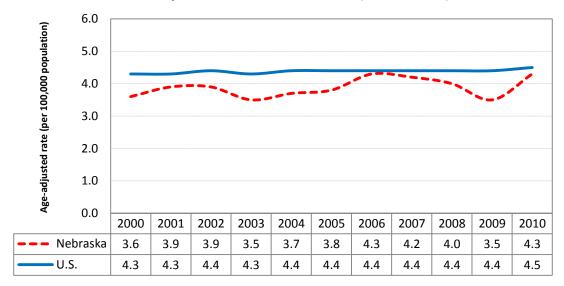
### **Urinary Bladder Cancer**

Incidence Rates, Nebraska & U.S. (2000-2010)



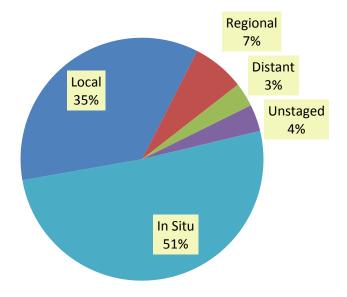
# **Urinary Bladder Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



# **Urinary Bladder Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



#### Non-Hodgkin Lymphoma

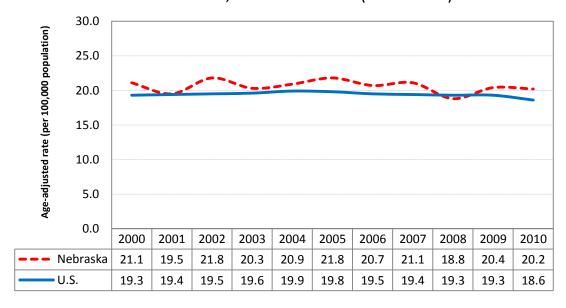
Lymphomas are cancers that affect the white blood cells of the immune system, and are usually classified as either Hodgkin or Non-Hodgkin lymphoma. Non-Hodgkin lymphoma is by far the more common disorder of the two, accounting for 1,963 diagnoses and 699 deaths among Nebraska residents between 2006 and 2010 (for Hodgkin lymphoma, the comparable figures are 268 diagnoses and 42 deaths). National statistics indicate that the incidence rate for Non-Hodgkin lymphoma has increased by about 80% since the mid-1970s, and some of this increase is related to the appearance of AIDS. However, both state and national data show that Non-Hodgkin lymphoma deaths have been increasing since at least 1950, which indicates that factors other than AIDS are also responsible.

The causes of Non-Hodgkin lymphoma remain unknown, although there is evidence that viral exposures and reduced immune function are associated with the disease. People whose immune systems have been suppressed by drugs, particularly those who have received an organ transplant, are at high risk of Non-Hodgkin lymphoma, and it also occurs more frequently among people with congenital and acquired immunologic disorders, including AIDS. The increased incidence of the disease among people with congenital disorders of the immune system suggests that hereditary factors may increase risk. Some studies have found that occupational exposure to certain herbicides is a risk factor as well.

Incidence and mortality statistics by county of residence for Non-Hodgkin lymphoma are presented in Appendix VI (Table 14).

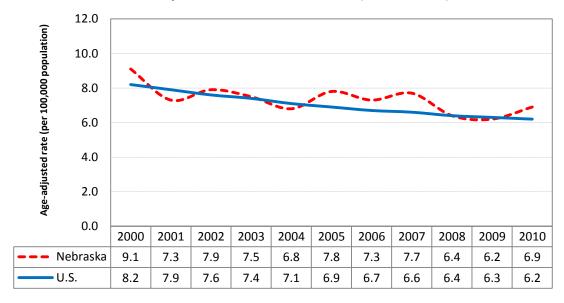
## Non-Hodgkin Lymphoma

Incidence Rates, Nebraska & U.S. (2000-2010)



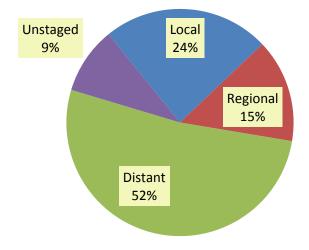
# Non-Hodgkin Lymphoma

Mortality Rates, Nebraska & U.S. (2000-2010)



# Non-Hodgkin Lymphoma

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



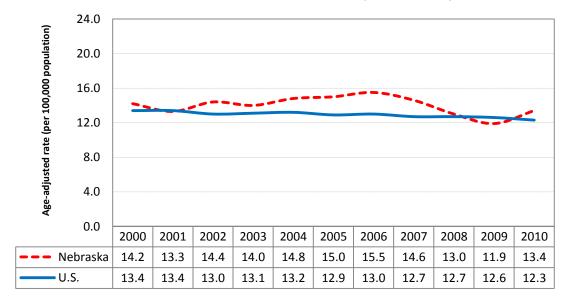
#### Leukemia

Between 2006 and 2010, leukemia accounted for 1,339 diagnoses and 689 deaths among Nebraska residents. Although leukemia is one of the most common types of cancer diagnosed among children and adolescents, nearly 60% of the leukemia cases that occurred in Nebraska between 2006 and 2010 were 65 years of age or older at diagnosis. There are many different types of leukemia: acute lymphocytic leukemia is the most frequently diagnosed among children, while acute myeloid and chronic lymphocytic are the most common types among adults. Survival rates vary widely by type: overall, about half of all leukemia patients remain alive at least five years after diagnosis.

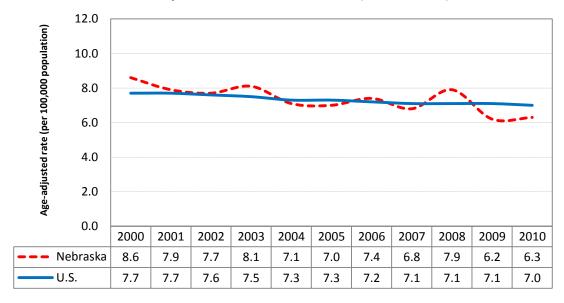
The major causes of most types of leukemia are unknown. Nevertheless, several risk factors have been identified, and include genetic abnormalities (such as Down's syndrome), exposure to ionizing radiation, and workplace exposure to benzene and other related solvents. Adult T-cell leukemia is strongly associated with infection by a retrovirus, the human T-cell lymphotropic virus, type I (HTLV-I). Cigarette smoking is a risk factor for acute myeloid leukemia, while people who have a family history of chronic lymphocytic leukemia carry an increased risk of the disease themselves.

Incidence and mortality statistics by county of residence for leukemia are presented in Appendix VII (Table 15).

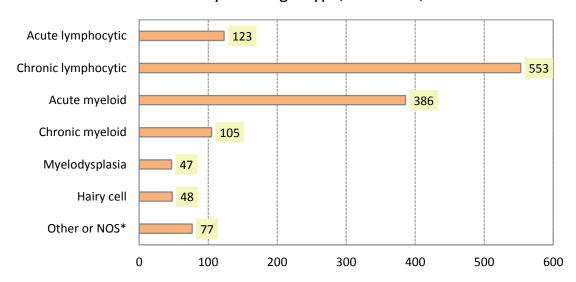
**Leukemia**Incidence Rates, Nebraska & U.S. (2000-2010)



**Leukemia**Mortality Rates, Nebraska & U.S. (2000-2010)



**Leukemia**Number of Cases by Histologic Type, Nebraska, 2006-2010



<sup>\*</sup> includes plasma cell leukemia (8 cases); mast cell leukemia (1 case); acute biphenotypic leukemia (1 case); aggressive NK-cell leukemia (1 case); hypereosinophilic syndrome (1 case); acute leukemia, NOS (23 cases); lymphoid leukemia, NOS (1 case); myeloid leukemia, NOS (18 cases); leukemia, NOS (23 cases)

Abbreviation: NOS, not otherwise specified

#### **Kidney and Renal Pelvis**

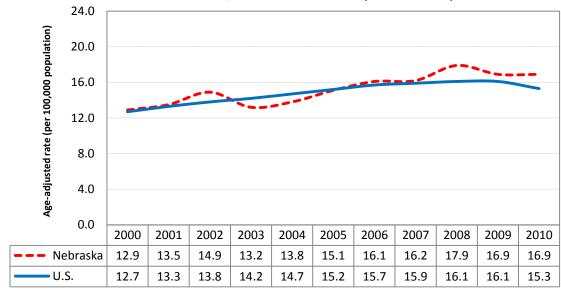
Cancers of the kidney and renal pelvis accounted for 1,628 diagnoses in Nebraska between 2006 and 2010, and also accounted for 423 deaths in Nebraska during the same years. State and national trends since 1990 show a significant increase in the rate of diagnosis of these cancers, but little change in the mortality rate. The chances of survival for people with kidney cancer are relatively high, with the most current national statistics showing that the 5-year survival rate for cancers of the kidney and renal pelvis is now over 70%.

Preventable risk factors for cancer of the kidney include cigarette smoking and obesity. Current estimates indicate that cigarette smoking is responsible for about one-third of all kidney cancer deaths. Kidney cancer is more likely to strike at younger ages than most other types; in Nebraska, almost half (49.9%) of the cases that were diagnosed during 2006-2010 were under the age of 65. Other non-preventable risk factors for cancer of the kidney include a family history of kidney cancer and high blood pressure. However, since people with high blood pressure are often treated with prescription drugs, it is unclear whether their increased risk is related to their high blood pressure or the medication. Nevertheless, people who need medication(s) to lower their blood pressure should take them as advised by their primary care doctor.

Incidence and mortality statistics by county of residence for cancers of the kidney and renal pelvis are presented in Appendix VIII (Table 16).

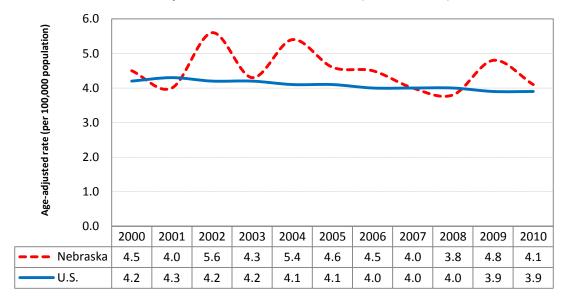
## **Kidney and Renal Pelvis Cancer**

Incidence Rates, Nebraska & U.S. (2000-2010)



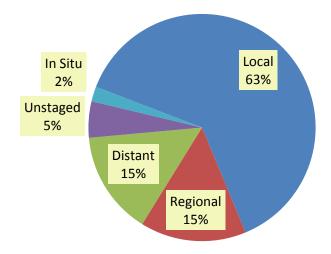
# **Kidney and Renal Pelvis Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



# **Kidney and Renal Pelvis Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



#### Melanoma of the Skin

There are several different types of skin cancer, but melanomas are the most serious. Nationally, melanomas comprise only about 5% of all skin cancer diagnoses but about 80% of all skin cancer deaths. Specifically, in Nebraska, melanomas of the skin accounted for 1,672 diagnoses and 290 deaths between 2006 and 2010. The incidence of melanoma continues to increase significantly in Nebraska and throughout the United States. Because most melanomas are discovered early in their development and can be surgically removed, the 5-year survival rate is now over 90%.

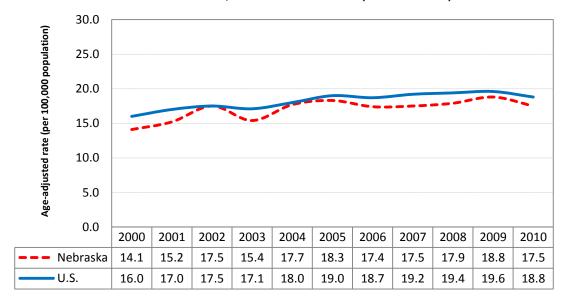
Melanoma is related to exposure to ultraviolet radiation (most of which comes from the sun), particularly exposures during childhood that resulted in severe sunburns. The risk of developing melanoma is particularly high among people with light skin. Sun exposure is not the only risk factor. Family history of melanoma and the presence of numerous dysplastic nevi (large moles with irregular coloration and shape) also increase a person's risk of the disease.

Skin melanomas are among the most preventable and treatable of all cancers. Wearing protective clothing and using sunscreen are the best methods for preventing the disease, and children in particular should have such protection. In addition, early detection can greatly reduce the risk of melanoma mortality. Recognition of changes in skin growths or the appearance of new growths is the best way to find melanomas early in their development. The ACS suggests that adults practice skin self-examination on a monthly basis, and that suspicious lesions should be evaluated promptly by a physician.

Incidence and mortality statistics by county of residence for melanoma of the skin are presented in Appendix IX (Table 17).

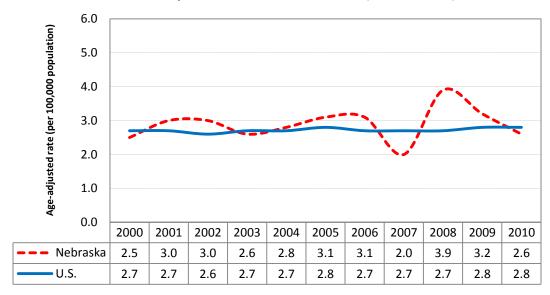
### Melanoma of the Skin

Incidence Rates, Nebraska & U.S. (2000-2010)



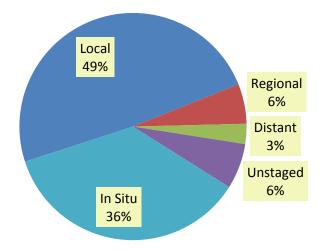
## Melanoma of the Skin

Mortality Rates, Nebraska & U.S. (2000-2010)



## Melanoma of the Skin

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



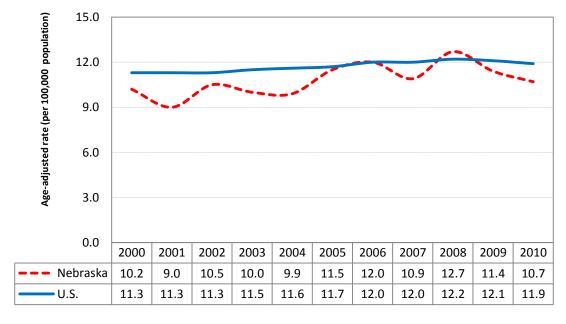
#### **Pancreas**

Although it does not rank as one of Nebraska's top ten most frequently diagnosed types of cancer, cancer of the pancreas is the fourth most deadly cancer in Nebraska and throughout the United States. In Nebraska, pancreatic cancer accounted for 1,144 diagnoses and 1,079 deaths between 2006 and 2010. Diagnosis does not usually occur until the disease is well advanced, due to a lack of symptoms. As a result, survival is poor: the most recent national 5-year survival rate is only 6%. Nationally, pancreatic cancer has shown a slightly upward trend during the past 10 years.

Preventable risk factors for cancer of the pancreas include cigarette smoking and obesity. Smokers have two times the risk of developing the disease as do nonsmokers, and about 20% of pancreatic cancers are attributable to smoking. Non-preventable risk factors include family history, genetic factors, age, and certain medical conditions. Individuals 70 years of age or older have a four times higher risk of developing pancreatic cancer within the next 10 years than those age 50. Medical conditions like chronic pancreatitis (inflammation of the pancreas) and diabetes can heighten the risk of pancreatic cancer, although both of these conditions may also be early symptoms of the disease. Unfortunately, no reliable screening test has been found to aid in prevention of the disease, and screening is not recommended for the general population.

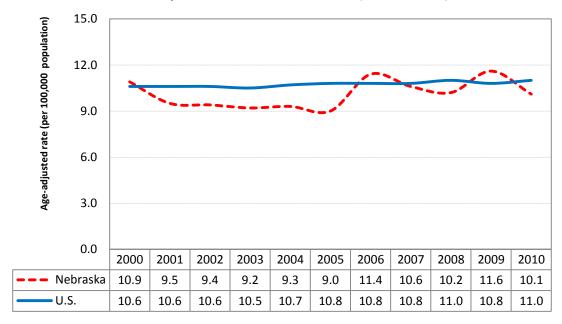
Incidence and mortality statistics by county of residence for cancers of the pancreas are presented in Appendix X (Table 18).

## Pancreatic Cancer Incidence Rates, Nebraska & U.S. (2000-2010)



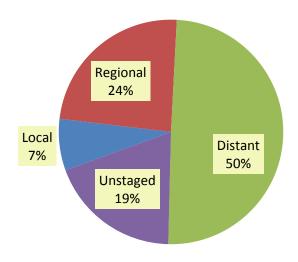
## **Pancreatic Cancer**

Mortality Rates, Nebraska & U.S. (2000-2010)



## **Pancreatic Cancer**

Percentage of Cases, by Stage of Disease at Diagnosis Nebraska, 2006-2010



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## **APPENDICES**

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TABLE 9: Lung and Bronchus Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	Incid	ence	Morta	ality
	# Cases	Rate	# Deaths	<u>Rate</u>
U.S.	999,050	66.6	792,213	49.5
NEBRASKA	5,978	61.3	4,537	46.2
<u>COUNTY</u>				
ADAMS	111	59.2	95	49.6
ANTELOPE	26	49.1	18	33.8
ARTHUR	0	0.0	*	**
BANNER	4	**		**
BLAINE BOONE	27	65.7	3 19	39.3
BOX BUTTE	37	53.5	29	41.1
BOYD	15	70.1	11	51.6
BROWN	10	36.8	13	43.5
BUFFALO	134	60.3	110	49.8
BURT	40	67.9	32	56.8
BUTLER	24	43.3	19	31.6
CASS	104	71.6	77	51.8
CEDAR	23	33.7▽	22	31.5▽
CHASE	17	57.8	11	34.8
CHERRY	25	56.7	22	48.3
CHEYENNE	37	58.2	33	49.0
CLAY	41	87.6	32	68.1
COLFAX	42	71.9	23	40.3
CUMING CUSTER	28 59	39.7∇ 70.4	21 46	29.3∇ 50.7
DAKOTA	75	70.4 74.2	52	50.7 52.2
DAWES	20	38.1∇	18	31.0
DAWSON	51	38.8▼	41	30.2▼
DEUEL	5	**	3	**
DIXON	24	58.7	9	20.8▼
DODGE	170	67.7	140	54.4
DOUGLAS	1,664	73.0	1,199	52.9▲
DUNDY	6	40.1	6	33.4
FILLMORE	26	51.4	16	31.9
FRANKLIN	13	48.4	8	25.6▽
FRONTIER	13	77.0	14	77.3
FURNAS	21	49.9	12	27.2∇
GAGE GARDEN	94 11	58.3 54.8	78 5	48.9 **
GARDEN	9	44.8	5 5	**
GOSPER	10	61.8	5	**
GRANT	*	**	*	**
GREELEY	10	46.2	9	40.6
HALL	180	58.5	146	46.7
HAMILTON	24	40.8∇	20	32.9
HARLAN	17	54.1	19	59.4
HAYES	5	**	5	**
HITCHCOCK	20	78.0	16	61.1
HOLT	48	59.8	43	52.1
HOOKER	4	**	3	**
HOWARD	33	72.6	22	49.4
JEFFERSON	41	61.2	29	44.0

TABLE 9 (continued): Lung and Bronchus Cancer Incidence and Mortality

	Incidence		<u>Mortality</u>	
	# Cases	Rate	# Deaths	Rate
COUNTY			· <u></u>	
JOHNSON	23	61.0	13	31.4
KEARNEY	25	56.4	16	35.0
KEITH	30	43.4∇	28	41.8
KEYA PAHA	*	**	*	**
KIMBALL	17	57.6	11	37.5
KNOX	50	68.7	36	46.7
LANCASTER	745	58.5	549	43.4
LINCOLN	149	68.0	104	46.7
LOGAN	3	**	*	**
LOUP	5	**	*	**
McPHERSON	*	**	*	**
MADISON	155	78.0	101	50.8△
MERRICK	31	56.8	22	39.2
MORRILL	18	50.6	10	29.8
NANCE	15	50.2	14	47.3
NEMAHA	25	50.6	18	35.0
NUCKOLLS	19	44.3	13	29.4
OTOE	63	57.5	55	50.0
PAWNEE	12	47.8	9	33.5
PERKINS	12	52.8	9	41.2
PHELPS	32	49.1	18	27.0 ▼
PIERCE	30	61.4	21	43.0
PLATTE	92	50.2	80	44.1
POLK	20	48.9	15	35.8
RED WILLOW	47	60.4	46	57.8
RICHARDSON	48	71.1	38	55.6
ROCK	5	**	*	**
SALINE	52	62.7	38	46.1
SARPY	361	65.5	266	48.3
SAUNDERS	90	69.7	78	60.1
SCOTTS BLUFF	113	46.9▼	97	39.2
SEWARD	45	45.1 ▽	48	47.5
SHERIDAN	20	42.7	16	32.5
SHERMAN	17	62.7	22	85.7△
SIOUX	*	**	*	**
STANTON	11	32.6▼	13	38.2
THAYER	21	42.4	16	30.3
THOMAS	*	**	*	**
THURSTON	22	66.4	16	48.2
VALLEY	20	52.7	12	30.1
WASHINGTON	66	57.2	59	51.8
WAYNE	12	21.4▼	13	23.9▼
WEBSTER	24	73.4	14	41.2
WHEELER	0	0.0	0	0.0
YORK	26	27.3▼	30	31.5▽

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

TABLE 10: Female Breast Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u>Incidence</u>		<u>Mortality</u>	
	# Cases	Rate	# Deaths	Rate
U.S.	987,033	121.9	203,683	22.7
NEBRASKA	6,257	122.3	1,115	20.1
COUNTY				
ADAMS	134	147.9	22	22.5
ANTELOPE	34	138.5	10	35.3
ARTHUR	*	**	0	0.0
BANNER	*	**	0	0.0
BLAINE	*	**	0	0.0
BOONE	24	109.9	5	
BOX BUTTE	45	117.1	10	23.5
BOYD	12	173.8	0	0.0
BROWN	11	81.9		
BUFFALO	148	124.3	29	24.2
BURT	36	123.7	5	
BUTLER	34	117.4	11	30.6
CASS	85	118.0	14	19.0
CEDAR	25	74.1 ▼	4	
CHASE	15	117.8	4	**
CHERRY	27	125.9	3	
CHEYENNE	42	132.6	8	25.8
CLAY	20	85.8	4	
COLFAX	21	77.9∇	14	42.2
CUMING	32	106.8	3	
CUSTER	49	125.1	11	17.7
DAKOTA	46	85.2▼	6	10.4∇
DAWES	30	114.5	8	21.7
DAWSON	62	89.1 ▼	12 *	18.2 **
DEUEL	14	152.8		**
DIXON	19 100	96.8	4	
DODGE	166	136.8	30	20.6
DOUGLAS	1,681	129.4	292	22.0
DUNDY	8	91.4	3	
FILLMORE	25	119.7 165.0	6 *	19.6
FRANKLIN FRONTIER	21 5	**	4	**
FURNAS	23	120.2	<del>4</del> *	**
GAGE	116	145.3	19	20.4
GARDEN	12	133.8	3	20. <del>4</del> **
GARFIELD	11	112.2	3	**
GOSPER	10	128.4	*	**
GRANT	*	**	0	0.0
GREELEY	4	**	*	**
HALL	172	107.3	30	17.7
HAMILTON	37	125.3	4	**
HARLAN	22	200.4	8	51.1
HAYES	*	**	0	0.0
HITCHCOCK	12	95.2	3	**
HOLT	43	117.6	6	13.0
HOOKER	4	**	Ö	0.0
HOWARD	24	107.9	7	28.5
JEFFERSON	25	70.2▼	8	19.8

TABLE 10 (continued): Female Breast Cancer Incidence and Mortality

	Incid	<u>ence</u>	<u>Morta</u>	ality
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	19	106.8	8	39.2
KEARNEY	24	106.2	*	**
KEITH	29	86.9∇	7	19.7
KEYA PAHA	*	**	*	**
KIMBALL	17	126.5	4	**
KNOX	36	117.4	3	**
LANCASTER	909	129.6	124	16.9
LINCOLN	130	120.8	31	26.8
LOGAN	*	**	0	0.0
LOUP	5	**	0	0.0
McPHERSON	*	**	0	0.0
MADISON	133	135.2	33	28.9
MERRICK	35	125.5	4	**
MORRILL	19	122.1	*	**
NANCE	10	71.8▽	3	**
NEMAHA	28	107.1	4	**
NUCKOLLS	19	116.4	6	21.1
OTOE	54	99.7	7	10.5▽
PAWNEE	11	78.7	5	**
PERKINS	8	54.4▼	*	**
PHELPS	36	107.5	8	20.3
PIERCE	18	73.3▼	3	**
PLATTE	116	121.3	18	18.3
POLK	28	145.1	7	36.2
RED WILLOW	40	103.4	9	19.2
RICHARDSON	42	125.3	12	20.3
ROCK	5	**	0	0.0
SALINE	53	125.7	4	**
SARPY	450	130.4	65	20.7
SAUNDERS	70	110.9	17	25.8
SCOTTS BLUFF	168	138.8	34	26.1
SEWARD	58	114.0	16	25.4
SHERIDAN	21	93.6	3	**
SHERMAN	14	127.6	*	**
SIOUX	*	**	*	**
STANTON	8	42.3▼	4	**
THAYER	16	77.5▽	*	**
THOMAS	*	**	0	0.0
THURSTON	19	104.7	6	32.9
VALLEY	9	55.9▼	4	**
WASHINGTON	78	131.0	12	17.8
WAYNE	26	112.2	6	24.7
WEBSTER	22	156.0	*	**
WHEELER	*	**	0	0.0
YORK	69	142.5	16	29.8

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level) ▲county rate is significantly higher than the state rate (99% confidence level)

TABLE 11: Colon & Rectum (Colorectal) Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u>Incidence</u>		<u>Mortality</u>	
	# Cases	Rate	# Deaths	<u>Rate</u>
U.S.	672,211	44.7	134,624	16.4
NEBRASKA	5,004	50.6	1,813	17.8
COUNTY				
ADAMS	116	59.9	26	13.2
ANTELOPE	27	49.7	8	13.3
ARTHUR	3	**	*	**
BANNER	*	**	0	0.0
BLAINE	0	0.0	0	0.0
BOONE	27	66.0	12	26.5
BOX BUTTE	28	38.9	12	15.6 **
BOYD BROWN	9 20	40.7 69.4	3 3	**
BUFFALO	120	52.5	52	22.6
BURT	30	45.4	16	23.8
BUTLER	35	56.0	10	14.1
CASS	85	58.8	31	21.7
CEDAR	26	35.6	10	12.1
CHASE	13	38.7	3	**
CHERRY	23	50.5	10	24.5
CHEYENNE	25	36.9	9	12.3
CLAY	29	58.9	10	20.3
COLFAX	26	41.8	20	31.8
CUMING	33	45.0	16	21.5
CUSTER	42	50.5	16	17.1
DAKOTA	56	57.2	19	19.0
DAWES DAWSON	17 83	35.5 62.4	8 23	13.9 16.4
DEUEL	8	52.4 51.1	23 *	10. <del>4</del> **
DIXON	21	52.4	12	28.1
DODGE	142	57.6	57	21.5
DOUGLAS	1,140	49.2	393	16.8
DUNDY	6	33.9	6	30.5
FILLMORE	24	53.1	12	22.9
FRANKLIN	11	39.1	*	**
FRONTIER	13	63.5	5	**
FURNAS	32	75.6	9	18.7
GAGE	90	54.9 **	44 *	24.8
GARDEN	4		*	**
GARFIELD	13	65.5		**
GOSPER GRANT	7 *	48.6 **	4 0	0.0
GREELEY	11	46.7	5	**
HALL	181	57.0	73	23.0
HAMILTON	20	31.8∇	8	12.2
HARLAN	27	85.7△	12	37.7
HAYES	*	**	0	0.0
HITCHCOCK	6	23.7▼	*	**
HOLT	48	57.7	19	21.7
HOOKER	5	**	*	**
HOWARD	27	60.8	9	19.5
JEFFERSON	31	48.7	8	10.4

TABLE 11 (continued): Colon & Rectum (Colorectal) Cancer Incidence and Mortality

	1	Incidence	Me	ortality
	# Cases	Rate	# Deaths	Rate
<u>COUNTY</u>				
JOHNSON	28	74.1	9	22.6
KEARNEY	27	60.8	9	17.6
KEITH	32	52.3	15	23.2
KEYA PAHA	7	87.4	3	**
KIMBALL	12	38.1	6	17.6
KNOX	36	51.5	19	23.9
LANCASTER	586	45.7	182	14.0▼
LINCOLN	95	43.1	34	14.5
LOGAN	*	**	0	0.0
LOUP	5	**	0	0.0
McPHERSON	*	**	*	**
MADISON	116	56.9	48	22.9
MERRICK	28	52.5	16	29.5
MORRILL	16	43.7	6	15.2
NANCE	19	60.7	8	27.8
NEMAHA	27	53.3	8	16.3
NUCKOLLS	27	63.8	8	15.5
OTOE	52	47.6	20	17.1
PAWNEE	17	61.4	5	**
PERKINS	12	62.3	5	**
PHELPS	28	42.6	8	11.0
PIERCE	38	74.3	14	26.3
PLATTE	106	58.1	34	19.1
POLK	21	51.9	7	14.5
RED WILLOW	47	59.0	15	16.6
RICHARDSON	47	68.7	17	20.8
ROCK	9	89.3	5	**
SALINE	64	78.6▲	19	21.4
SARPY	272	48.3	86	16.4
SAUNDERS	71	55.9	33	26.1
SCOTTS BLUFF	111	48.3	34	13.5
SEWARD	52	52.6	19	18.1
SHERIDAN	25	64.1	10	20.3
SHERMAN	13	47.0	4	**
SIOUX	0	0.0	*	**
STANTON	14	38.7	4	**
THAYER	23	44.4	10	16.8
THOMAS	*	**	0	0.0
THURSTON	19	57.8	12	34.2
VALLEY	12	33.0	8	20.5
WASHINGTON	47	40.8	22	19.8
WAYNE	28	54.6	12	21.7
WEBSTER	29	80.5	13	37.1
WHEELER	0	0.0	*	**
YORK	37	40.4	17	16.1

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level) ▼ county rate is significantly lower than the state rate (99% confidence level) ∆ county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

TABLE 12: Prostate Cancer Incidence and Mortality
Number of Cases, Deaths, and Rates, by County of Residence

Nebraska & U.S. (2006-2010)

	<u>Incidence</u>		<u>Mortality</u>	
	# Cases	<u>Rate</u>	# Deaths	<u>Rate</u>
U.S.	1,022,829	146.2	142,586	23.0
NEBRASKA	6,424	143.0	931	22.9
COUNTY				
ADAMS	114	134.4	17	20.8
ANTELOPE	44	179.0	3	**
ARTHUR	*	**	0	0.0
BANNER	3	**	0	0.0
BLAINE	3	**	*	**
BOONE	32	163.8	3	**
BOX BUTTE BOYD	45 10	140.9 116.6	3	**
BROWN	28	217.3	5	**
BUFFALO	156	152.0	15	17.2
BURT	35	130.0	8	29.9
BUTLER	40	144.4	*	**
CASS	84	122.0	10	19.5
CEDAR	32	101.9▽	9	26.5
CHASE	31	222.7	*	**
CHERRY	29	140.6	3	**
CHEYENNE	47	164.4	9	33.0
CLAY	40	177.6	7	34.8
COLFAX	45	171.4	7	27.1 **
CUMING	51	157.1	3	
CUSTER DAKOTA	58 57	146.3	10	26.2
DAWES	31	121.4 121.6	10 12	26.0 49.0
DAWSON	70	109.2∇	18	31.3
DEUEL	9	109.5	3	**
DIXON	30	154.9	5	**
DODGE	218	196.4▲	18	15.9
DOUGLAS	1,532	146.5	210	24.1
DUNDY	12	155.4	*	**
FILLMORE	29	138.2	5	**
FRANKLIN	18	136.3	4	**
FRONTIER	23	234.4	4	**
FURNAS	21	112.9	4	
GAGE	78	106.5▼	18 *	24.4
GARDEN GARFIELD	13 14	143.5 161.6	*	**
GOSPER	19	236.0	*	**
GRANT	6	241.5	0	0.0
GREELEY	18	171.2	*	**
HALL	246	170.2△	22	17.0
HAMILTON	35	125.7	5	**
HARLAN	22	141.4	6	37.5
HAYES	6	166.3	0	0.0
HITCHCOCK	15	123.4	*	**
HOLT	58	159.2 **	10	25.2 **
HOOKER	5			**
HOWARD JEFFERSON	38 31	177.8 104.9	4 12	37.4
JEI I ENGON	31	104.3	12	31.4

TABLE 12 (continued): Prostate Cancer Incidence and Mortality

	Inci	dence	Morta	ality
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	21	128.3	4	**
KEARNEY	20	94.6▽	*	**
KEITH	35	115.5	7	26.4
KEYA PAHA	*	**	*	**
KIMBALL	17	122.2	*	**
KNOX	48	148.0	8	24.7
LANCASTER	739	123.5 ▼	117	23.6
LINCOLN	131	128.0	19	21.4
LOGAN	7	239.7	0	0.0
LOUP	11	466.2△	*	**
McPHERSON	*	**	0	0.0
MADISON	161	181.0△	18	20.8
MERRICK	44	171.8	4	**
MORRILL	27	153.4	3	**
NANCE	14	106.8	*	**
NEMAHA	30	131.0	8	36.0
NUCKOLLS	26	133.4	6	26.4
OTOE	53	104.8∇	13	25.6
PAWNEE	18	157.5	7	53.2
PERKINS	11	104.2	0	0.0
PHELPS	40	137.0	13	42.7
PIERCE	40	179.0	5	**
PLATTE	138	166.0	11	14.3
POLK	22	118.1	0	0.0
RED WILLOW	41	116.8	6	16.7
RICHARDSON	28	88.2▼	9	26.4
ROCK	16	265.8	*	**
SALINE	61	164.7	11	30.2
SARPY	399	146.9	41	22.3
SAUNDERS	90	149.7	13	25.5
SCOTTS BLUFF	169	158.5	21	20.0
SEWARD	56	118.5	10	23.5
SHERIDAN	26	127.9	8	33.1
SHERMAN	15	120.5	4	**
SIOUX	6	102.8	0	0.0
STANTON	6	37.3▼	4	**
THAYER	30	140.9	7	25.7
THOMAS	4	**	0	0.0
THURSTON	19	128.2	*	**
VALLEY	29	178.5	6	32.8
WASHINGTON	73	140.6	13	30.1
WAYNE	39	158.8	5	**
WEBSTER	25	166.7	4	**
WHEELER	6	205.7	0	0.0
YORK	48	114.1	14	33.3

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level) ▼ county rate is significantly lower than the state rate (99% confidence level)

Δcounty rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

TABLE 13: Urinary Bladder Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	Incid	lence	<u>Morta</u>	ality
	# Cases	<u>Rate</u>	# Deaths	Rate
U.S.	312,240	20.9	70,285	4.4
NEBRASKA	1,964	20.0	414	4.0
COUNTY				
ADAMS	38	19.3	7	3.3
ANTELOPE	13	25.1	*	**
ARTHUR	0	0.0	0	0.0
BANNER BLAINE	*	**	0	0.0
BOONE	11	23.4	3	**
BOX BUTTE	9	12.7	*	**
BOYD	*	**	*	**
BROWN	3	**	*	**
BUFFALO	44	19.1	10	4.7
BURT	10	15.2	*	**
BUTLER	7	10.8∇	3 4	**
CASS CEDAR	21 11	14.8 15.3	0	0.0
CHASE	12	36.2	3	**
CHERRY	7	15.5	*	**
CHEYENNE	21	32.1	*	**
CLAY	7	14.5	*	**
COLFAX	9	14.7	*	**
CUMING	11	15.1	3	**
CUSTER DAKOTA	14 17	15.9 17.6	3 5	**
DAWES	10	18.2	3 *	**
DAWSON	33	24.5	4	**
DEUEL	3	**	*	**
DIXON	*	**	*	**
DODGE	52	20.7	10	3.4
DOUGLAS	504	22.1 **	121	5.4 **
DUNDY	5		*	**
FILLMORE FRANKLIN	6 3	10.2∇ **	3 0	0.0
FRONTIER	6	28.4	0	0.0
FURNAS	15	34.2	*	**
GAGE	35	19.4	7	3.3
GARDEN	5	**	*	**
GARFIELD	7	32.4	*	**
GOSPER	9	53.2	0	0.0
GRANT GREELEY	0 4	0.0	0	0.0
HALL	63	19.4	16	4.7
HAMILTON	12	21.5	4	**
HARLAN	7	22.0	*	**
HAYES	*	**	*	**
HITCHCOCK	7	26.6	0	0.0
HOLT	13 *	15.5 **	3	
HOOKER HOWARD	5	**	0	0.0
JEFFERSON	5 15	23.0	7	9.4
JEI I EIGOIN	10	20.0	,	5.4

TABLE 13 (continued): Urinary Bladder Cancer Incidence and Mortality

COUNTY		Incid	ence	<u>Mortality</u>	
DOHNSON   5		·			
Solition	COUNTY				
KEITH 13 20.1 4 *** KEYA PAHA 3 *** 0 0.00 KIMBALL 8 27.1 *** KNOX 10 12.2 3 *** LANCASTER 225 18.1 49 3.9 LANCASTER 225 18.1 49 3.9 LOUP 3 23.7 9 4.1 LOGAN 3 *** 0 0.00 LOUP 3 *** MCPHERSON ** *** MADISON 33 15.6 5 *** MADISON 33 15.6 5 *** MCRRICK 5 *** * *** MORRILL 6 15.7 *** MORRILL 6 15.7 *** MORRILL 6 15.7 *** NICKOLLS ** *** 3 *** NUCKOLLS ** *** 3 *** NUCKOLLS ** *** 3 *** PHELPS 9 14.4 28.8 *** PHELPS 9 14.4 10 0.00 PERKINS ** *** *** PIERCE 12 24.4 3 *** PLATTE 28 14.4 10 5.2 POLK 7 15.0 *** RED WILLOW 22 27.5 4 *** RICHARDSON 10 16.3 *** RICHARDSON 10 16.3 *** ROCK ** *** 0 0.00 SALINE 14 15.7 4 *** SARPY 125 23.2 18 3.9 SALINE 14 15.7 4 *** SARPY 125 23.2 18 3.9 SALINE 14 15.7 4 *** SARPY 125 23.2 18 3.9 SALINE 14 15.7 4 *** SARPY 125 23.2 18 3.9 SHERIDAN 6 10.9 *** SHERIDAN 6 10.9 *** SHERMAN 4 *** SHERMAN 6 SHOW SHERMAN 7 SHERMAN 7 SHOW SHEMAN 7 SHOW SHERMAN 7 SHOW SHEMAN 7 SHOW SHOW SHOW SHOW SHOW	JOHNSON		**		0.0
KEYA PAHA         3         **         0         0.0           KIMBALL         8         27.1         *         **           KNOX         10         12.2         3         **           LANCASTER         225         18.1         49         3.9           LINCOLN         53         23.7         9         4.1           LOGAN         3         **         0         0.0           LOUP         3         **         *         **           MCPHERSON         *         **         **         **           MADISON         33         15.6         5         **           MERRICK         5         **         *         **           MORRILL         6         15.7         *         **           MUCKOLLS         *         **         **         **           NUCKOLLS         *         **         **         **           PERKINS         *	KEARNEY		18.5	4	**
KIMBALL  KIMOX  10  12.2  3  LANCASTER  225  18.1  LOGAN  3.23.7  9  4.1  LOGAN  3.3  **  0.00  LOUP  3.**  MCPHERSON  MADISON  33  15.6  5  **  MERRICK  5  **  MANCE  3.**  NEMAHA  14  28.8  NUCKOLLS  **  **  **  **  **  **  **  **  **	KEITH	13	20.1	4	**
KNOX         10         12.2         3         ***           LANCASTER         225         18.1         49         3.9           LINCOLN         53         23.7         9         4.1           LOGAN         3         **         0         0.0           LOUP         3         **         *         **           MCPHERSON         *         **         **         **           MADISON         33         15.6         5         **           MERRICK         5         **         **         **           MORRILL         6         15.7         *         **           NANCE         3         **         *         **           NUCKOLLS         *         **         3         **           NUCKOLLS         *         **         3         **           PAWNEE         3         **         0         0.0           PERKINS         *         **         0         0.0           PEERKINS         *         **         **         **           PEERKINS         *         **         **         **           PLATTE         28         14.4	KEYA PAHA	3	**	0	0.0
NOOX 10 12.2 3 LINCOLN 53 23.7 9 4.1 LOGAN 3 ** 0 0.0 LOUP 3 ** *	KIMBALL	8	27.1	*	**
LANCASTER LINCOLN 53 23.7 9 4.1 LOGAN 3 *** 0 0.00 LOUP 3 *** MCPHERSON ** MCPHERSON ** MADISON 33 15.6 5 ** MERRICK 5 MERRICK 5 ** MORRILL 6 15.7 ** NEMAHA 14 28.8 ** NUCKOLLS ** ** ** ** NUCKOLLS ** ** ** ** ** ** ** ** ** ** ** ** **	KNOX	10	12.2	3	**
LINCOLN 53 23.7 9 4.1  LOGAN 3 ** 0 0.00  LOUP 3 ** * * * * **  McPHERSON * 1* ** * * * **  MADISON 33 15.6 5 * **  MADISON 33 15.6 5 * **  MORRILL 6 15.7 * * * * * **  MORRILL 6 15.7 * * * * * * * * * * * * * * * * * * *	LANCASTER	225	18.1		3.9
LOGAN 3 ** 0 0 0.0 LOUP 3 ** ** * * ** ** ** ** ** ** ** ** **			23.7		
LOUP 3 ** ** ** ** ** ** ** ** ** ** ** ** *	LOGAN				0.0
McPHERSON         *         **         *         **           MADISON         33         15.6         5         **           MERRICK         5         **         *         **           MORRILL         6         15.7         *         **           NANCE         3         **         *         **           NEMAHA         14         28.8         *         **           NEMAHA         14         28.8         *         **           NUCKOLLS         *         **         3         **           OTOE         26         23.2         *         **           PAWNEE         3         **         0         0.0           PERKINS         *         **         *         **           PHELPS         9         14.4         *         **         **           PHELPS         9         14.4         10         5.2         **           PLATTE         28         14.4         10         5.2         **           PLATTE         28         14.4         10         5.2         **           RED WILLOW         22         27.5         4         **			**		
MADISON         33         15.6         5         **           MERRICK         5         **         *         **           MORRILL         6         15.7         *         **           NANCE         3         **         *         **           NEMAHA         14         28.8         *         **           NUCKOLLS         *         **         **         3         **           POUK         *         26         23.2         *         **			**	*	**
MERRICK         5         ***         *         ***           MORRILL         6         15.7         *         ***           NANCE         3         ***         *         ***           NEMAHA         14         28.8         *         ***           NUCKOLLS         *         ***         **         3         ***           OTOE         26         23.2         *         **           PAWNEE         3         ***         0         0.0           PERKINS         *         **         *         **           PHELPS         9         14.4         *         **           PHELPS         9         14.4         *         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RED WILLOW         22         27.5         4         **           ROCK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SA		33	15.6	5	**
MORRILL 6 15.7 * * **  NANCE 3 * **  NEMAHA 14 28.8 * *  NEMAHA 14 28.8 * *  NUCKOLLS * * ** 3 **  OTOE 26 23.2 * *  PAWNEE 3 * ** 0 0.0  PERKINS * * **  PHELPS 9 14.4 * *  PIERCE 12 24.4 3 **  PLATTE 28 14.4 10 5.2  POUK 7 15.0 * * **  RED WILLOW 22 27.5 4 **  RICHARDSON 10 16.3 * **  ROCK * * ** 0 0.0  SALINE 14 15.7 4 * **  SARPY 125 23.2 18 3.9  SAUNDERS 25 20.0 6 4.7  SCOTTS BLUFF 57 23.7 8 3.9  SAUNDERS 25 20.0 6 4.7  SCOTTS BLUFF 57 23.7 8 3.9  SHERIDAN 6 10.9 * **  SHERMAN 4 * **  SHERMAN 4 * **  THAYER 12 21.1 4 **  THOMAS * * **  THAYER 12 21.1 4 **  THOMAS * * **  VALLEY 8 16.2 5 * **  WASHINGTON 26 22.7 * *  WEBSTER 9 25.1 0 0 0.0  WHEELER **					**
NANCE			15.7	*	**
NEMAHA         14         28.8         *         **           NUCKOLLS         *         **         **         3         **           OTOE         26         23.2         *         **           PAWNEE         3         **         0         0.0           PERKINS         *         **         *         **           PHELPS         9         14.4         *         **           PIERCE         12         24.4         3         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RED WILLOW         22         27.5         4         **           RCOK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SALINE         14         15.7         4         **           SALINE         14         15.7         4         **           SALINE         14         15.2         23.2         18         3.9				*	**
NUCKOLLS OTOE	-		28.8	*	**
OTOE         26         23.2         *         **           PAWNEE         3         **         0         0.0           PERKINS         *         **         *         **           PHELPS         9         14.4         *         **           PHERCE         12         24.4         3         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         *           SHERMAN <td></td> <td></td> <td></td> <td>3</td> <td>**</td>				3	**
PAWNEE 3 *** 0 0.00 PERKINS ** *** *** ** PHELPS 9 14.4 ** PIERCE 12 24.4 3 ** PLATTE 28 14.4 10 5.2 POLK 7 15.0 * ** RED WILLOW 22 27.5 4 ** RICHARDSON 10 16.3 ** ROCK * *** 0 0.00 SALINE 14 15.7 4 ** SARPY 125 23.2 18 3.9 SAUNDERS 25 20.0 6 4.7 SCOTTS BLUFF 57 23.7 8 3.9 SAUNDERS 25 20.0 6 4.7 SCOTTS BLUFF 57 23.7 8 3.2 SEWARD 22 21.6 3 ** SHERIDAN 6 10.9 ** SHERIDAN 6 10.9 ** SHERIDAN 4 ** SIOUX 0 0.0 ** STANTON 4 *** THAYER 12 21.1 4 ** THOMAS * ** THAYER 12 21.1 4 ** THOMAS * ** THOMAS * ** THOMAS * ** VALLEY 8 16.2 5 ** WASHINGTON 26 22.7 ** WASHINGTON 26 22.7 ** WASHINGTON 26 22.7 ** WAYNE 11 20.1 ** WEBSTER 9 25.1 0 0 0.0 WHEELER **  WEBSTER 9 25.1 0 0.00 WHEELER		26	23.2		**
PERKINS         *         **         **         **           PHELPS         9         14.4         *         **           PIERCE         12         24.4         3         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **           THAYER         12         21.1         4         **           THOMAS<				0	0.0
PHELPS         9         14.4         *         **           PIERCE         12         24.4         3         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **           SHOUX         0         0.0         *         **           STANTON         4         **         *         **           THOMAS			**		
PIERCE         12         24.4         3         **           PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **           SHOUX         0         0.0         *         **           STANTON         4         **         *         **           THOMAS         *         **         *         **           THOMAS         *		۵	1/1/	*	**
PLATTE         28         14.4         10         5.2           POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **         **           SHERMAN         4         **         *         **         **           SHERMAN         4         **         *         *         **           THAYER         12         21.1         4         **           THOMAS         *         *         *         *				2	**
POLK         7         15.0         *         **           RED WILLOW         22         27.5         4         **           RICHARDSON         10         16.3         *         **           ROCK         *         **         **         0         0.0           SALINE         14         15.7         4         **           SAPPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **           SHERMAN         4         **         *         **           SIOUX         0         0.0         *         **           STANTON         4         **         *         **           THAYER         12         21.1         4         **           THURSTON         7         21.9         *         **           WASHINGTON <td></td> <td></td> <td></td> <td></td> <td>5.2</td>					5.2
RED WILLOW 22 27.5 4 **  RICHARDSON 10 16.3 * **  ROCK * * ** 0 0 0.0  SALINE 14 15.7 4 **  SARPY 125 23.2 18 3.9  SAUNDERS 25 20.0 6 4.7  SCOTTS BLUFF 57 23.7 8 3.2  SEWARD 22 21.6 3 **  SHERIDAN 6 10.9 * **  SHERMAN 4 ** * *  SIOUX 0 0.0 0.0 **  STANTON 4 **  THAYER 12 21.1 4 **  THOMAS * * 0 0.0  THURSTON 7 21.9 * **  VALLEY 8 16.2 5 **  WASHINGTON 26 22.7 **  WAYNE 11 20.1 **  WEBSTER 9 25.1 0 0 0.0  WHEELER **				-	
RICHARDSON       10       16.3       *       **         ROCK       *       **       0       0.0         SALINE       14       15.7       4       **         SARPY       125       23.2       18       3.9         SAUNDERS       25       20.0       6       4.7         SCOTTS BLUFF       57       23.7       8       3.2         SEWARD       22       21.6       3       **         SHERIDAN       6       10.9       *       *         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       **         THAYER       12       21.1       4       **         THOMAS       *       **       0       0.0         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       *         WAYNE       11       20.1       *       **         WEBSTER       9       25.1       0				4	**
ROCK         *         **         0         0.0           SALINE         14         15.7         4         **           SARPY         125         23.2         18         3.9           SAUNDERS         25         20.0         6         4.7           SCOTTS BLUFF         57         23.7         8         3.2           SEWARD         22         21.6         3         **           SHERIDAN         6         10.9         *         **           SHERMAN         4         **         *         **           SIOUX         0         0.0         *         **         **           STANTON         4         **         *         **         **           THAYER         12         21.1         4         **           THOMAS         *         **         0         0.0           THURSTON         7         21.9         *         **           VALLEY         8         16.2         5         **           WASHINGTON         26         22.7         *         *           WAYNE         11         20.1         *         * <t< td=""><td></td><td><del></del></td><td></td><td></td><td>**</td></t<>		<del></del>			**
SALINE 14 15.7 4 **  SARPY 125 23.2 18 3.9  SAUNDERS 25 20.0 6 4.7  SCOTTS BLUFF 57 23.7 8 3.2  SEWARD 22 21.6 3 **  SHERIDAN 6 10.9 *  SHERMAN 4 **  SIOUX 0 0.0 0.0 *  STANTON 4 **  THAYER 12 21.1 4 **  THOMAS * **  THOMAS * **  VALLEY 8 16.2 5 **  WASHINGTON 26 22.7 **  WAYNE 11 20.1 **  WEBSTER 9 25.1 0 0.0  WHEELER **		_		0	0.0
SARPY       125       23.2       18       3.9         SAUNDERS       25       20.0       6       4.7         SCOTTS BLUFF       57       23.7       8       3.2         SEWARD       22       21.6       3       **         SHERIDAN       6       10.9       *       **         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       **         THAYER       12       21.1       4       **         THOMAS       *       *       *       **         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       *       **         WAYNE       11       20.1       *       *       **         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0					
SAUNDERS       25       20.0       6       4.7         SCOTTS BLUFF       57       23.7       8       3.2         SEWARD       22       21.6       3       **         SHERIDAN       6       10.9       *       **         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       **         THAYER       12       21.1       4       **         THOMAS       *       **       0       0.0         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       **         WAYNE       11       20.1       *       **         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0	-		_	=	
SCOTTS BLUFF       57       23.7       8       3.2         SEWARD       22       21.6       3       **         SHERIDAN       6       10.9       *       **         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       **         THAYER       12       21.1       4       **         THOMAS       *       *       0       0.0         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       **         WAYNE       11       20.1       *       **         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0		-		-	
SEWARD       22       21.6       3       **         SHERIDAN       6       10.9       *       **         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       **         THAYER       12       21.1       4       **         THOMAS       *       *       0       0.0         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       **         WAYNE       11       20.1       *       **         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0					
SHERIDAN       6       10.9       *       **         SHERMAN       4       **       *       **         SIOUX       0       0.0       *       **         STANTON       4       **       *       *         THAYER       12       21.1       4       **         THOMAS       *       *       0       0.0         THURSTON       7       21.9       *       **         VALLEY       8       16.2       5       **         WASHINGTON       26       22.7       *       **         WAYNE       11       20.1       *       **         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0		-	-		
SHERIDAN         6         10.9           SHERMAN         4         **         *         **           SIOUX         0         0.0         *         **         **           STANTON         4         **         *         *         **		<del></del>	-		
SIOUX         0         0.0         *         **           STANTON         4         **         *         **           THAYER         12         21.1         4         **           THOMAS         *         **         0         0.0           THURSTON         7         21.9         *         **           VALLEY         8         16.2         5         **           WASHINGTON         26         22.7         *         **           WAYNE         11         20.1         *         **           WEBSTER         9         25.1         0         0.0           WHEELER         *         **         *         0         0.0	•	-			**
STANTON         4         **         *         **           THAYER         12         21.1         4         **           THOMAS         *         **         0         0.0           THURSTON         7         21.9         *         **           VALLEY         8         16.2         5         **           WASHINGTON         26         22.7         *         **           WAYNE         11         20.1         *         **           WEBSTER         9         25.1         0         0.0           WHEELER         *         **         0         0.0	-				
THAYER 12 21.1 4 ** THOMAS * * * 0 0.0 THURSTON 7 21.9 * ** VALLEY 8 16.2 5 ** WASHINGTON 26 22.7 * * WAYNE 11 20.1 * ** WEBSTER 9 25.1 0 0.0 WHEELER * * **					
THATER 12 21.1 4 THOMAS * * * * 0 0.0 THURSTON 7 21.9 * ** VALLEY 8 16.2 5 ** WASHINGTON 26 22.7 * * WAYNE 11 20.1 * ** WEBSTER 9 25.1 0 0.0 WHEELER * * ** 0 0.0	-				
THURSTON 7 21.9 * **  VALLEY 8 16.2 5 **  WASHINGTON 26 22.7 * **  WAYNE 11 20.1 * **  WEBSTER 9 25.1 0 0.0  WHEELER * **  0.00				=	
VALLEY 8 16.2 5 ** WASHINGTON 26 22.7 * ** WAYNE 11 20.1 * ** WEBSTER 9 25.1 0 0.0 WHEELER * **				_	
VALLET       8       16.2       5         WASHINGTON       26       22.7       *       *         WAYNE       11       20.1       *       *       *         WEBSTER       9       25.1       0       0.0         WHEELER       *       **       0       0.0		· · · · · · · · · · · · · · · · · · ·	-		
WAYNE 11 20.1 * ** WEBSTER 9 25.1 0 0.0 WHEELER * ** 0 0.0			-		
WEBSTER 9 25.1 0 0.0 WHEELER * ** 0 0.0		-			
WHEELER					
Wheeler 0 0.0					
YORK 24 23.7 4 **					
	YURK	24	23.7	4	**

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level) ▼ county rate is significantly lower than the state rate (99% confidence level) △ county rate is significantly higher than the state rate (95% confidence level) ▲ county rate is significantly higher than the state rate (99% confidence level)

TABLE 14: Non-Hodgkin Lymphoma Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u>Incidence</u>		Mortality	
	# Cases	<u>Rate</u>	# Deaths	<u>Rate</u>
U.S.	286,940	19.2	102,174	6.4
NEBRASKA	1,963	20.2	699	6.9
<u>COUNTY</u>				
ADAMS	43	24.1	17	8.2
ANTELOPE	7	12.3	7	11.5
ARTHUR	0	0.0	0	0.0
BANNER	0	0.0	*	**
BLAINE	0	0.0	0	0.0
BOONE	10	26.8	4	**
BOX BUTTE	11	15.3	3	**
BOYD	0 5	0.0 **	*	**
BROWN BUFFALO	38	17.1	9	3.9
BURT	11	22.2	6	8.9
BUTLER	5	**	5	**
CASS	34	23.2	15	10.5
CEDAR	6	9.4▽	4	**
CHASE	7	21.7	4	**
CHERRY	7	17.7	3	**
CHEYENNE	18	28.8	4	**
CLAY	11	24.2	6	14.1
COLFAX	12	21.4	5	**
CUMING	19	29.5	5	**
CUSTER	16	18.4	7	7.2
DAKOTA	15	15.5	7	7.4 **
DAWES DAWSON	6 11	10.5∇ 8.4 <b>▼</b>	5 4	**
DEUEL	3	0.4 ▼ **	0	0.0
DIXON	9	21.3	4	V.U **
DODGE	64	25.7	28	9.7
DOUGLAS	516	21.8	168	7.3
DUNDY	3	**	3	**
FILLMORE	13	24.7	6	8.7
FRANKLIN	*	**	*	**
FRONTIER	5	**	*	**
FURNAS	15	34.3	9	21.8△
GAGE	28	16.8 **	18	10.3
GARDEN	4	**	0	0.0
GARFIELD GOSPER	3 4	**	0 0	0.0 0.0
GRANT	*	**	0	0.0
GREELEY	*	**	0	0.0
HALL	78	25.3	19	6.0
HAMILTON	15	25.6	4	**
HARLAN	4	**	*	**
HAYES	*	**	*	**
HITCHCOCK	4	**	0	0.0
HOLT	10	15.5	*	**
HOOKER	0	0.0	0	0.0
HOWARD	14	34.2	*	**
JEFFERSON	6	9.9∇	*	**

TABLE 14 (continued): Non-Hodgkin Lymphoma Incidence and Mortality

	Incid	ence	Morta	lity
	# Cases	<u>Rate</u>	# Deaths	Rate
COUNTY				
JOHNSON	11	31.3	4	**
KEARNEY	6	15.3	3	**
KEITH	8	14.5	*	**
KEYA PAHA	3	**	*	**
KIMBALL	6	20.5	4	**
KNOX	16	21.5	5	**
LANCASTER	264	20.5	96	7.4
LINCOLN	45	20.6	11	4.5
LOGAN	0	0.0	0	0.0
LOUP	3	**	0	0.0
McPHERSON	0	0.0	0	0.0
MADISON	34	16.9	15	7.6
MERRICK	9	17.3	3	**
MORRILL	4	**	*	**
NANCE	7	24.9	3	**
NEMAHA	9	18.2	6	12.0
NUCKOLLS	7	17.0	*	**
OTOE	19	16.7	5	**
PAWNEE	*	**	3	**
PERKINS	3	**	*	**
PHELPS	7	10.3∇	3	**
PIERCE	5	**	*	**
PLATTE	36	20.5	4	**
POLK	5	**	*	**
RED WILLOW	13	16.6	8	9.4
RICHARDSON	14	21.8	4	**
ROCK	3	**	3	**
SALINE	15	18.6	7	6.9
SARPY	124	21.5	35	6.6
SAUNDERS	27	22.0	13	10.2
SCOTTS BLUFF	39	16.8	18	7.0
SEWARD	26	26.2	9	8.0
SHERIDAN	5	**	4	**
SHERMAN	4	**	*	**
SIOUX	*	**	0	0.0
STANTON	*	**	*	**
THAYER	9	20.9	3	**
THOMAS	0	0.0	0	0.0
THURSTON	8	23.1	*	**
VALLEY	4	**	*	**
WASHINGTON	21	17.9	4	**
WAYNE	15	27.9	4	**
WEBSTER	6	17.7	3	**
WHEELER	0	0.0	0	0.0
YORK	21	24.5	8	7.4

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

# TABLE 15: Leukemia Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u>Incid</u>	ence	<u>Morta</u>	lity
	# Cases	Rate	# Deaths	Rate
U.S.	186,443	12.6	111,739	7.1
NEBRASKA	1,339	13.7	689	6.9
NEBRASKA  COUNTY ADAMS ANTELOPE ARTHUR BANNER BLAINE BOONE BOX BUTTE BOYD BROWN BUFFALO BURT BUTLER CASS CEDAR CHASE CHERRY CHEYENNE CLAY COLFAX CUMING CUSTER DAKOTA DAWES DAWSON DEUEL DIXON DODGE DOUGLAS DUNDY FILLMORE FRANKLIN FRONTIER FURNAS GAGE GARDEN	# Cases  186,443 1,339  27 9 0 0 0 7 9 * * 22 10 3 19 5 6 9 7 9 12 7 10 12 6 9 * 10 28 340 3 8 0 3 4 19 5	<u>Rate</u> 12.6	# Deaths  111,739 689  17 3 0 0 0 4 7 * * 24 4 0 14 5 * 4 6 5 6 5 7 5 7 8 * * 8 18 145 * * * 0 * 10 *	<u>Rate</u> 7.1
GARFIELD GOSPER GRANT	4 4 0	** 0.0	3 3 0	** 0.0
GREELEY HALL HAMILTON HARLAN HAYES HITCHCOCK HOLT HOOKER HOWARD	6 40 10 6 0 4 10 0	28.9 13.3 16.7 25.3 0.0 ** 16.2 0.0 14.4	* 18 3 0 * * 3 0 6	5.4 ** 0.0 ** ** ** 0.0 12.4
JEFFERSON	7	11.4	7	9.0

TABLE 15 (continued): Leukemia Incidence and Mortality

	Incid	<u>lence</u>	<u>Mort</u>	ality
	# Cases	Rate	# Deaths	Rate
COUNTY	_		*	**
JOHNSON	6	14.4 **		**
KEARNEY	4		3	
KEITH	9	14.0	7	12.8
KEYA PAHA	0	0.0	0	0.0
KIMBALL	3		5	**
KNOX	7	13.2	4	
LANCASTER	179	13.8	92	6.9
LINCOLN LOGAN	40	18.0	12	5.5
LOUP	0	0.0	0 0	0.0 0.0
McPHERSON	*	**	0	0.0
MADISON	25	12.7	9	0.0 4.4
MERRICK	4	1 Z . I **	*	4.4 **
MORRILL	7	18.4	5	**
NANCE	4	**	*	**
NEMAHA	5	**	4	**
NUCKOLLS	3	**	*	**
OTOE	15	13.9	10	9.2
PAWNEE	5	**	*	**
PERKINS	4	**	3	**
PHELPS	7	12.1	6	8.9
PIERCE	6	13.0	3	**
PLATTE	22	12.0	5	**
POLK	6	17.0	*	**
RED WILLOW	15	20.7	7	9.1
RICHARDSON	6	8.6	8	11.0
ROCK	*	**	0	0.0
SALINE	12	12.9	3	**
SARPY	84	13.3	38	6.7
SAUNDERS	15	11.9	11	8.5
SCOTTS BLUFF	33	14.2	18	7.1
SEWARD	13	12.4	5	**
SHERIDAN	5	**	5	**
SHERMAN	11	44.4△	5	**
SIOUX	*	**	*	**
STANTON	3	**	*	**
THAYER	10	20.4	6	13.5
THOMAS	3	**	0	0.0
THURSTON	4	**	4	**
VALLEY	*	**	*	**
WASHINGTON	9	7.8	6	5.0
WAYNE	6	13.6	*	**
WEBSTER	5 *	**	3	**
WHEELER		**	0	0.0
YORK	17	18.2	14	13.8

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

TABLE 16: Kidney and Renal Pelvis Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u> 1</u>	ncidence	<u>Mort</u>	ality
	# Cases	Rate	# Deaths	Rate
U.S.	239,266	15.8	64,191	4.0
NEBRASKA	1,628	16.8	423	4.3
COUNTY ADAMS	20	11.8	9	5.5 **
ANTELOPE ARTHUR BANNER	7 0 *	14.2 0.0 **	0 *	0.0
BLAINE BOONE	0 6	0.0 15.9	0 3	0.0
BOX BUTTE	15 *	21.6	*	**
BOYD BROWN	*	**	0 0	0.0 0.0
BUFFALO	31	13.4	11	5.2
BURT	8	14.2	4	**
BUTLER CASS	8 33	12.3	*	**
CEDAR	33 13	24.1 20.3	12 5	8.8 **
CHASE	*	**	0	0.0
CHERRY	5	**	0	0.0
CHEYENNE CLAY	8 7	13.9 15.6	0 3	0.0
COLFAX	4	13.0	<b>3</b> *	**
CUMING	8	14.2	*	**
CUSTER	11	13.3	3	**
DAKOTA	11	11.2	4	**
DAWES DAWSON	6 21	10.9 16.2	6 6	11.2 4.7
DEUEL	∠ I *	10.Z **	*	4.7 **
DIXON	6	15.2	*	**
DODGE	53	22.8	17	6.7
DOUGLAS	469 *	19.7∆ **	115	5.0
DUNDY FILLMORE	5	**	0	0.0
FRANKLIN	6	23.3	*	**
FRONTIER	*	**	0	0.0
FURNAS	7	18.6	*	**
GAGE GARDEN	27	19.2 **	8 0	4.7 0.0
GARDEN	*	**	*	**
GOSPER	3	**	0	0.0
GRANT	*	**	*	**
GREELEY	*	**	0	0.0
HALL HAMILTON	72 7	23.9∆ 12.2	7 5	2.1∇ **
HARLAN	6	21.3	3	**
HAYES	*	**	0	0.0
HITCHCOCK	6	30.7	*	**
HOOKER	9 3	11.8 **	*	**
HOOKER HOWARD	3 4	**	0	0.0 **
JEFFERSON	5	**	0	0.0

TABLE 16 (continued): Kidney and Renal Pelvis Cancer Incidence and Mortality

	I.	ncidence	<u>Mortalit</u>	·V
	# Cases	Rate	# Deaths	Rate
COUNTY				<u></u>
<del>JOHNSO</del> N	4	**	*	**
KEARNEY	9	19.7	0	0.0
KEITH	8	11.6	*	**
KEYA PAHA	*	**	0	0.0
KIMBALL	5	**	*	**
KNOX	13	18.9	3	**
LANCASTER	202	15.4	47	3.8
LINCOLN	31	14.8	3	**
LOGAN	3	**	0	0.0
LOUP	0	0.0	0	0.0
McPHERSON	*	**	0	0.0
MADISON	38	19.2	7	3.3
MERRICK	16	31.4	6	10.6
MORRILL	6	19.2	*	**
NANCE	3	**	*	**
NEMAHA	8	17.9	*	**
NUCKOLLS	*	**	0	0.0
OTOE	11	10.6	6	5.8
PAWNEE	4	**	*	**
PERKINS	3	**	0	0.0
PHELPS	11	19.3	4	**
PIERCE	3	**	*	**
PLATTE	24	13.2	9	4.6
POLK	8	16.8	6	14.0
RED WILLOW	12	15.1	3	**
RICHARDSON	15	21.4	*	**
ROCK	*	**	0	0.0
SALINE	15	20.8	*	**
SARPY	118	18.7	23	4.2
SAUNDERS	18	13.9	6	4.7
SCOTTS BLUFF	31	13.0	12	5.0
SEWARD	16	18.7	7	7.3
SHERIDAN	*	**	*	**
SHERMAN	*	**	*	**
SIOUX	*	**	*	**
STANTON	*	**	*	**
THAYER	5	**	5	**
THOMAS	*	**	0	0.0
THURSTON	5	**	*	**
VALLEY	6	15.7	*	**
WASHINGTON	15	13.2	3	**
WAYNE	5	**	*	**
WEBSTER	*	**	0	0.0
WHEELER	*	**	*	**
YORK	14	15.0	4	**

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<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup> county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level)

<sup>▲</sup> county rate is significantly higher than the state rate (99% confidence level)

TABLE 17: Melanoma of the Skin Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	<u>Inci</u>	<u>dence</u>	<u>Morta</u>	<u>ality</u>
	# Cases	Rate	# Deaths	Rate
U.S.	285,113	19.1	43,878	2.7
NEBRASKA	1,672	17.8	290	2.9
	1,072	17.0	290	2.9
COUNTY	4.4	05.7	0	<b>5</b> 0
ADAMS	44	25.7	9	5.0 **
ANTELOPE ARTHUR	11 0	22.7 0.0	3 0	
BANNER	*	V.U **	0	0.0 0.0
BLAINE	*	**	0	0.0
BOONE	10	33.8	0	0.0
BOX BUTTE	11	16.1	3	**
BOYD	*	**	0	0.0
BROWN	*	**	*	**
BUFFALO	20	9.2▼	13	6.2
BURT	15	34.0	*	**
BUTLER	12	21.8	4	**
CASS	29	21.1	8	5.4
CEDAR	7	13.2	*	**
CHASE	4	**	0	0.0
CHERRY	3	**	*	**
CHEYENNE	12	21.6	*	**
CLAY	8	20.5	*	**
COLFAX	12	20.7	3	**
CUMING	7	11.3	3	**
CUSTER	11	16.2	5	**
DAKOTA	10	10.6	4 *	**
DAWES	4			**
DAWSON	15 *	11.4 **	3	
DEUEL			0	0.0
DIXON	11 21	27.5	3	
DODGE DOUGLAS	446	9.6 <b>▼</b> 18.5	8 57	3.4 2.4
DUNDY	8	50.4	0	0.0
FILLMORE	7	17.1	4	**
FRANKLIN	3	**	0	0.0
FRONTIER	*	**	0	0.0
FURNAS	7	21.1	0	0.0
GAGE	24	16.9	5	**
GARDEN	3	**	*	**
GARFIELD	*	**	0	0.0
GOSPER	*	**	0	0.0
GRANT	3	**	0	0.0
GREELEY	*	**	0	0.0
HALL	30	9.8▼	5	**
HAMILTON	5	**	0	0.0
HARLAN	5	**	3	**
HAYES	0	0.0	0	0.0
HITCHCOCK	4	**	0	0.0
HOLT	13	17.0	*	**
HOOKER	*	**	0	0.0
HOWARD	6	13.9	*	**
JEFFERSON	6	10.8	•	

TABLE 17 (continued): Melanoma of the Skin Incidence and Mortality

	Inci	<u>dence</u>	<u>Mortal</u>	itv
	# Cases	Rate	# Deaths	Rate
COUNTY				
JOHNSON	3	**	0	0.0
KEARNEY	6	15.2	*	**
KEITH	5	**	*	**
KEYA PAHA	*	**	0	0.0
KIMBALL	4	**	*	**
KNOX	14	25.9	*	**
LANCASTER	261	19.8	37	2.9
LINCOLN	30	15.3	7	3.2
LOGAN	0	0.0	0	0.0
LOUP	0	0.0	0	0.0
McPHERSON	0	0.0	0	0.0
MADISON	39	22.0	*	**
MERRICK	8	17.7	*	**
MORRILL	4	**	*	**
NANCE	3	**	0	0.0
NEMAHA	9	19.6	3	**
NUCKOLLS	14	39.7△	*	**
OTOE	14	16.6	*	**
PAWNEE	4	**	*	**
PERKINS	6	25.3	0	0.0
PHELPS	11	19.0	4	**
PIERCE	6	16.1	*	**
PLATTE	32	17.8	5	**
POLK	10	29.8	*	**
RED WILLOW	13	18.4	*	**
RICHARDSON	3	**	4	**
ROCK	*	**	0	0.0
SALINE	17	22.5	7	9.0
SARPY	134	21.1	16	2.7
SAUNDERS	19	15.8	5	**
SCOTTS BLUFF	36	16.7	8	3.5
SEWARD	23	25.8	*	**
SHERIDAN	3	2J.U **	*	**
SHERMAN	3	**	0	0.0
SIOUX	0	0.0	*	**
STANTON	5	**	*	**
THAYER	10	17.0	*	**
THOMAS	0	0.0	0	0.0
THURSTON	· *	V.U **	*	0.0 **
VALLEY	3	**	0	0.0
WASHINGTON	3 24		0	0.0
WASHINGTON	24 12	22.3 23.7	5 *	**
WEBSTER	8	23.7 26.4	*	**
WEBSIER		-		
	0	0.0	0	0.0
YORK	11	12.6	4	

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level) ▲county rate is significantly higher than the state rate (99% confidence level)

TABLE 18: Pancreatic Cancer Incidence and Mortality Number of Cases, Deaths, and Rates, by County of Residence Nebraska & U.S. (2006-2010)

	Incide	ence	<u>Morta</u>	ality
	# Cases	Rate	# Deaths	Rate
U.S.	181,422	12.0	175,323	10.9
NEBRASKA	1,144	11.5	1,079	10.8
COUNTY ADAMS ANTELOPE	19 8	9.3 15.2	18 7	8.4 13.2
ARTHUR BANNER	0	0.0	0	0.0
BLAINE	*	**	*	**
BOONE	3	**	6	11.4
BOX BUTTE BOYD	15 0	20.3 0.0	9	12.9 **
BROWN	*	**	*	**
BUFFALO	16	6.8∇	16	6.5∇
BURT	6	9.5 **	6	9.2
BUTLER	5		5	
CASS CEDAR	18 9	13.0 12.9	17 9	11.8 11.2
CHASE	*	**	*	**
CHERRY	4	**	4	**
CHEYENNE	5	**	6	9.8
CLAY	7	14.3	5	**
COLFAX	4	**	*	**
CUMING CUSTER	11 9	17.5 9.1	12 5	16.7 **
DAKOTA	12	9.1 11.4	11	10.6
DAWES	12	20.9	10	17.2
DAWSON	10	7.3	11	8.1
DEUEL	*	**	*	**
DIXON	3	**	3	**
DODGE	30	11.0	32	11.7
DOUGLAS	310	13.3	279	12.2
DUNDY FILLMORE	0 7	0.0 12.8	0 9	0.0 15.8
FRANKLIN	3	12.0 **	3	13.6
FRONTIER	3	**	3	**
FURNAS	7	18.4	5	**
GAGE	20	11.2	15	8.1
GARDEN	3	**	*	**
GARFIELD	0	0.0	0	0.0
GOSPER	4	**	*	**
GRANT GREELEY	*	**	*	**
HALL	44	13.9	38	12.1
HAMILTON	5	**	4	**
HARLAN	5	**	3	**
HAYES	0	0.0	0	0.0
HITCHCOCK				
HOLT HOOKER	9 0	10.0 0.0	7 *	8.0
HOWARD	4	**	4	**
JEFFERSON	7	10.2	10	14.6

**TABLE 18 (continued): Pancreatic Cancer Incidence and Mortality** 

COUNTY
JOHNSON 3 *** 0 0.0 KEARNEY * * ** 4 4 *** KEITH 9 13.8 8 11.8 KEYA PAHA 0 0.0.0 * * *** KIMBALL 4 *** 3 *** KNOX 10 13.4 13 16.7 LANCASTER 137 10.8 141 11.1 LINCOLN 20 8.7 20 8.5 LOGAN * ** 0 0.0 LOUP 0 0 0.0 0 0 0.0 McPHERSON 3 *** * * * *** MADISON 28 14.1 26 13.5 MERRICK 8 15.2 5 *** MORRILL * * ** * * * * * *** MORRILL * * * * * * * * * * * * * * * * * *
KEARNEY
KEITH 9 13.8 8 11.8 KEYA PAHA 0 0.0.0 * ** KIMBALL 4 ** 3 ** KNOX 10 13.4 13 16.7 LANCASTER 137 10.8 141 11.1 LINCOLN 20 8.7 20 8.5 LOGAN * ** 0 0.0 LOUP 0 0.0.0 0 0.0 McPHERSON 3 ** * ** MADISON 28 14.1 26 13.5 MERRICK 8 15.2 5 ** MORRILL * * ** * * ** MORRILL * * ** * * ** NANCE 6 6 19.7 6 20.1 NEMAHA * * ** NUCKOLLS 3 ** NUCKOLLS 3 ** OTOE 10 9.2 11 10.2 PAWNEE * ** PERKINS * ** PHELPS 3 ** PHELPS 3 ** PHELPS 3 ** PHELPS 4 ** PHERCE 6 12.9 6 12.8 PLATTE 11 6.2∇ 18 9.6 POLK 3 ** RED WILLOW 14 16.5 16 18.9 RICHARDSON 14 22.1 10 14.0 ROCK 3 ** SALINE 13 16.8 12 15.6
KEYA PAHA       0       0.0       *       **         KIMBALL       4       **       3       **         KNOX       10       13.4       13       16.7         LANCASTER       137       10.8       141       11.1         LINCOLN       20       8.7       20       8.5         LOGAN       *       **       *       0       0.0         LOUP       0       0.0       0       0.0       0       0.0         MCPHERSON       3       **       *       *       **       **       **         MADISON       28       14.1       26       13.5       **
KIMBALL 4 ** 3 **  KNOX 10 13.4 13 16.7  LANCASTER 137 10.8 141 11.1  LINCOLN 20 8.7 20 8.5  LOGAN * ** 0 0 0.0  LOUP 0 0 0.0 0 0 0.0  McPHERSON 3 ** *  MADISON 28 14.1 26 13.5  MERRICK 8 15.2 5 **  MORRILL * ** ** *  NANCE 6 6 19.7 6 20.1  NEMAHA * **  NUCKOLLS 3 **  OTOE 10 9.2 11 10.2  PAWNEE * **  PERKINS * **  PERKINS * **  PERKINS * **  PHELPS 3 **  PHELPS 3 **  PHELPS 1 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2 \( \tau \)  PLATTE 11 6.2 \( \tau \)  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 **  SALINE 13 16.8 12 15.6
KNOX 10 13.4 13 16.7  LANCASTER 137 10.8 141 11.1  LINCOLN 20 8.7 20 8.5  LOGAN * ** ** 0 0 0.0  LOUP 0 0 0.0 0 0 0.0  McPHERSON 3 ** * **  MADISON 28 14.1 26 13.5  MERRICK 8 15.2 5 **  MORRILL * * ** * *  NANCE 6 19.7 6 20.1  NEMAHA * * ** 4 4 **  NUCKOLLS 3 ** * **  OTOE 10 9.2 11 10.2  PAWNEE * * **  PERKINS * * **  PERKINS * * **  PERKINS * * **  PHELPS 3 **  PHELPS 3 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2∇ 18 9.6  POLK 3 **  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 **  SALINE 13 16.8 12 15.6
LANCASTER 137 10.8 141 11.1  LINCOLN 20 8.7 20 8.5  LOGAN * * ** 0 0 0.0  LOUP 0 0 0.0 0 0 0 0.0  McPHERSON 3 ** * * *  MADISON 28 14.1 26 13.5  MERRICK 8 15.2 5 **  MORRILL * * ** * *  NANCE 6 6 19.7 6 20.1  NEMAHA * * **  NUCKOLLS 3 ** * *  OTOE 10 9.2 11 10.2  PAWNEE * * **  PERKINS * * * * 4 **  PHELPS 3 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2 V 18 9.6  POLK 3 **  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 **  SALINE 13 16.8 12 15.6
LINCOLN       20       8.7       20       8.5         LOGAN       *       **       **       0       0.0         LOUP       0       0.0       0       0.0       0.0         McPHERSON       3       **       *       **       **       **         MADISON       28       14.1       26       13.5       ** </td
LOGAN       *       **       **       0       0.0         LOUP       0       0.0       0       0.0         McPHERSON       3       **       *       **         MADISON       28       14.1       26       13.5         MERRICK       8       15.2       5       **         MORRILL       *       **       *       *       **         NANCE       6       19.7       6       20.1       NEMAHA       *       *       *       **         NEMAHA       *       **       *       4       **       **       *       **
LOUP 0 0.0 0.0 0 0.0 McPHERSON 3 ** * ** ** ** ** ** ** ** ** ** ** **
McPHERSON       3       **       *       **         MADISON       28       14.1       26       13.5         MERRICK       8       15.2       5       **         MORRILL       *       **       *       *       **       **       **         NANCE       6       19.7       6       20.1       ** </td
MADISON 28 14.1 26 13.5  MERRICK 8 15.2 5 **  MORRILL * * * * * *  NANCE 6 19.7 6 20.1  NEMAHA * * * 4 4 **  NUCKOLLS 3 **  OTOE 10 9.2 11 10.2  PAWNEE * * * * *  PERKINS * * * 4 **  PHELPS 3 **  PHELPS 3 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2∇ 18 9.6  POLK 3 **  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 **  SALINE 13 16.8 12 15.6
MERRICK       8       15.2       5       **         MORRILL       *       **       *       **       **         NANCE       6       19.7       6       20.1         NEMAHA       *       **       4       **         NUCKOLLS       3       **       *       **         OTOE       10       9.2       11       10.2         PAWNEE       *       **       *       **         PERKINS       *       **       4       **         PHELPS       3       **       4       **         PIERCE       6       12.9       6       12.8         PLATTE       11       6.2∇       18       9.6         POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       *       **         SALINE       13       16.8       12       15.6
MORRILL       *       **
NANCE 6 19.7 6 20.1  NEMAHA * * * * 4  NUCKOLLS 3 ** * * **  OTOE 10 9.2 11 10.2  PAWNEE * * * * 4  PERKINS * * * 4  PHELPS 3 ** 4 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2∇ 18 9.6  POLK 3 ** 4 **  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 ** * *  SALINE 13 16.8 12 15.6
NEMAHA       *       **       4       **         NUCKOLLS       3       **       *       **         OTOE       10       9.2       11       10.2         PAWNEE       *       **       *       **       **         PERKINS       *       **       4       **         PHELPS       3       **       4       **         PIERCE       6       12.9       6       12.8         PLATTE       11       6.2∇       18       9.6         POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       *         SALINE       13       16.8       12       15.6
NUCKOLLS 3 ** * **  OTOE 10 9.2 11 10.2  PAWNEE * * ** * *  PERKINS * * * 4 **  PHELPS 3 ** 4 **  PIERCE 6 12.9 6 12.8  PLATTE 11 6.2∇ 18 9.6  POLK 3 ** 4 **  RED WILLOW 14 16.5 16 18.9  RICHARDSON 14 22.1 10 14.0  ROCK 3 **  SALINE 13 16.8 12 15.6
OTOE       10       9.2       11       10.2         PAWNEE       *       **       *       **         PERKINS       *       **       4       **         PHELPS       3       **       4       **         PIERCE       6       12.9       6       12.8         PLATTE       11       6.2∇       18       9.6         POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
PAWNEE       *       **       *       *       **       *       **       *       ** <td< td=""></td<>
PERKINS  PERKINS  * * * 4  PHELPS  3 ** 4  PIERCE  6 12.9  6 12.8  PLATTE  11 6.2∇  18 9.6  POLK  3 ** 4  RED WILLOW  14 16.5  RICHARDSON  14 22.1  ROCK  3 **  SALINE  13 16.8  12 15.6
PHELPS 3 ** 4 ** PIERCE 6 12.9 6 12.8 PLATTE 11 6.2∇ 18 9.6 POLK 3 ** 4 ** RED WILLOW 14 16.5 16 18.9 RICHARDSON 14 22.1 10 14.0 ROCK 3 ** * * SALINE 13 16.8 12 15.6
PIERCE       6       12.9       6       12.8         PLATTE       11       6.2 ∇       18       9.6         POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
PLATTE       11       6.2 ∇       18       9.6         POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
POLK       3       **       4       **         RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
RED WILLOW       14       16.5       16       18.9         RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
RICHARDSON       14       22.1       10       14.0         ROCK       3       **       *       **         SALINE       13       16.8       12       15.6
ROCK     3     **     *     **       SALINE     13     16.8     12     15.6
SALINE 13 16.8 12 15.6
SARPY 66 11.8 57 11.2
SAUNDERS 22 17.2 18 14.3
SCOTTS BLUFF 25 10.6 23 9.4
SEWARD 12 12.5 15 15.1
SHERIDAN 4 ** * **
SHERMAN 3 ** 4 **
SIOUX
STANTON 0 0.0 * **
THAYER 6 10.5 6 9.3
THOMAS 0 0.0 0 0.0
THURSTON 4 ** 3 **
VALLEY 4 ** 5 **
WASHINGTON 7 $6.0\nabla$ 9 7.1
WAYNE 6 11.9 7 13.3
WEBSTER 7 18.5 6 16.8
WHEELER
YORK 12 13.1 5 **

<sup>\*</sup>Number is not shown if based on fewer than three events

<sup>\*\*</sup>Rate is not shown if based on five or fewer events

<sup>∇</sup>county rate is significantly lower than the state rate (95% confidence level)

<sup>▼</sup> county rate is significantly lower than the state rate (99% confidence level)

<sup>△</sup>county rate is significantly higher than the state rate (95% confidence level) ▲county rate is significantly higher than the state rate (99% confidence level)

TABLE 19: Cancer Incidence Number of Cases and Rates, All Sites and Selected Primary Sites, by Place of Residence Nebraska and Public Health Department Regions (2006-2010)

	All S	Sites	Lung & Bronchus		Female Breast		Colon & Rectum		Prostate	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	45,184	464.5	5,978	61.3	6,257	122.3	5,004	50.6	6,424	143.0
Central	1,976	473.8	235	55.7	244	112.2	229	52.9	325	164.0
Dakota County	425	425.3	75	74.2	46	85.2▼	56	57.2	57	121.4
Douglas County	11,696	495.6▲	1,664	73.0▲	1,681	129.4	1,140	49.2	1,532	146.5
East Central	1,370	447.5	176	56.1	171	108.3	178	56.1	229	161.5
Elkhorn Logan Valley	1,588	449.4	234	64.2	209	119.1	193	51.1	253	153.6
Four Corners	1,240	436.5	115	39.5▼	189	127.6	145	48.9	166	121.6
Lincoln/Lancaster County	5,931	455.1	745	58.5	909	129.6	586	45.7	739	123.5▼
Loup Basin	1,054	445.5	155	62.2	119	104.1	123	49.2	192	165.6
North Central	1,541	448.2	210	56.5	188	112.0	217	58.3	275	164.3
Northeast	748	396.9▼	81	41.4▼	89	93.4∇	94	48.8	120	134.3
Panhandle	1,388	408.7▼	171	48.5▼	204	117.5	137	39.3▼	224	136.2
Public Health Solutions	1,804	465.1	234	57.2	235	120.0	232	57.6	229	125.9
Sandhills	323	398.4▼	37	41.2▼	38	89.3∇	43	52.2	51	125.6
Sarpy Cass County	3,651	489.1△	465	66.2	535	127.5	357	50.5	483	141.6
Scotts Bluff County	1,029	446.2	113	46.9▼	168	138.8	111	48.3	169	158.5
South Heartland	1,447	488.3	195	62.6	195	135.5	201	62.8△	205	145.6
Southeast	1,214	439.7	171	59.2	154	106.9	171	57.8	150	112.6▼
Southwest	1,089	466.6	141	59.6	112	95.3∇	130	53.5	160	145.5
Three Rivers	2,267	471.3	326	65.4	314	127.8	260	53.0	381	167.4△
Two Rivers	2,343	442.0∇	282	52.2∇	323	116.8	303	55.7	345	136.2
West Central	1,060	471.8	153	67.1	134	119.5	98	42.7	139	130.4

**TABLE 19 (continued): Cancer Incidence** 

	Urinary	Urinary Bladder				Jrinary Bladder Non-Hodgkin Lymphoma Leukemia		emia	Kidney & Renal Pelvis		Melanoma of the Skin		Pancreas	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
NEBRASKA	1,964	20.0	1,963	20.2	1,339	13.7	1,628	16.8	1,672	17.8	1,144	11.5		
Central	80	18.4	102	24.2	54	13.1	95	23.5△	43	10.7∇	57	13.1		
Dakota County	17	17.6	15	15.5	12	11.7	11	11.2	10	10.6	12	11.4		
Douglas County	504	22.1	516	21.8	340	14.1	469	19.7△	446	18.5	310	13.3		
East Central	51	15.6	65	22.0	45	14.4	37	12.7	57	19.3	24	7.5∇		
Elkhorn Logan Valley	58	14.8∇	65	18.5	45	13.2	55	15.8	66	21.3	45	12.7		
Four Corners	60	19.1	57	20.4	39	13.4	46	16.4	56	21.5	32	11.1		
Lincoln/Lancaster County	225	18.1	264	20.5	179	13.8	202	15.4	261	19.8	137	10.8		
Loup Basin	47	17.1	46	19.1	40	16.7	26	11.0▽	27	13.4	23	8.7		
North Central	63	16.6	56	16.1	46	14.6	44	13.8	52	16.8	41	10.8		
Northeast	31	15.9	38	19.6	25	13.2	29	15.9	32	17.2	22	10.7		
Panhandle	69	19.0	58	17.0	45	12.6	47	14.5	44	15.1	48	13.5		
Public Health Solutions	82	18.4	71	17.8	56	13.4	57	16.2	64	17.6	53	12.3		
Sandhills	16	18.4	10	13.5	12	13.9	13	14.8	9	15.4	10	11.8		
Sarpy Cass County	146	21.4	158	21.9	103	13.5	151	19.8	163	20.7	84	12.1		
Scotts Bluff County	57	23.7	39	16.8	33	14.2	31	13.0	36	16.7	25	10.6		
South Heartland	56	17.3	67	22.6	44	14.2	30	10.8▽	74	27.0△	36	10.8		
Southeast	58	20.0	55	19.2	37	12.6	42	14.8	33	13.6	31	11.0		
Southwest	70	27.4△	52	21.2	39	17.1	34	14.9	44	19.7	28	11.4		
Three Rivers	103	21.0	112	23.0	52	10.9	86	17.9	64	14.4	59	11.6		
Two Rivers	113	20.7	72	13.5 ▼	52	9.9∇	87	16.3	61	11.9▼	43	7.6		
West Central	58	24.8	45	19.8	41	17.8	36	16.2	30	14.7	24	10.2		

<sup>\*\*</sup>Rate not shown if based on five or fewer events

∇regional rate is significantly lower than the state rate (95% confidence level)
▼regional rate is significantly lower than the state rate (99% confidence level)
Δregional rate is significantly higher than the state rate (95% confidence level)
▲regional rate is significantly higher than the state rate (99% confidence level)

Rates are per 100,000 population (excluding gender-specific sites, which are per 100,000 male or female population) and are age-adjusted to the 2000 U.S. population

# TABLE 20: Cancer Mortality Number of Deaths and Rates, All Sites and Selected Primary Sites, by Place of Residence Nebraska and Public Health Department Regions (2006-2010)

	All S	All Sites		ung & Bronchus Female Breast		Colon &	Rectum	Prostate		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	17,053	170.6	4,537	46.2	1,115	20.1	1,813	17.8	931	22.9
Central	732	168.6	188	43.8	38	16.6	97	22.2	31	17.2
Dakota County	166	166.4	52	52.2	6	10.4∇	19	19.0	10	26.0
Douglas County	4,257	184.4▲	1,199	52.9▲	292	22.0	393	16.8	210	24.1
East Central	526	163.5	136	42.9	40	23.4	74	23.3	23	16.7
Elkhorn Logan Valley	647	173.5	167	45.7	45	21.6	84	21.8	33	20.1
Four Corners	499	160.7	112	37.3∇	50	28.8	53	16.1	26	19.1
Lincoln/Lancaster County	2,050	159.1∇	549	43.4	124	16.9	182	14.0▼	117	23.6
Loup Basin	451	173.7	120	47.1	28	18.7	46	17.1	30	25.8
North Central	620	164.2	167	43.8	28	13.7∇	84	21.3	39	22.9
Northeast	315	156.1	60	30.4▼	20	20.0	46	21.9	21	23.2
Panhandle	568	155.2∇	129	35.6	40	20.9	55	14.5	42	26.2
Public Health Solutions	754	173.2	177	43.7	38	15.7	93	20.6	53	27.4
Sandhills	142	166.2	35	39.9	7	15.2	17	19.7	9	23.7
Sarpy Cass County	1,231	179.2	343	48.8	79	20.1	117	17.4	51	21.9
Scotts Bluff County	395	161.6	97	39.2	34	26.1	34	13.5	21	20.0
South Heartland	545	168.3	154	48.4	33	19.0	57	17.1	34	24.4
Southeast	508	166.7	133	45.4	36	18.5	59	18.6	41	30.4
Southwest	428	167.5	119	49.3	26	16.6	45	16.7	18	16.1
Three Rivers	943	186.4△	277	55.1△	59	21.1	112	22.1	44	20.7
Two Rivers	890	161.3	217	39.4	61	20.7	110	19.4	59	25.1
West Central	386	166.2	106	45.7	31	25.9	36	14.8	19	20.4

**TABLE 20 (continued): Cancer Mortality** 

	Urinary Bladder		Non-Hodgkin Lymphoma		Leukemia		Kidney & Renal Pelvis		Melanoma of the Skin		Pancreas	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NEBRASKA	414	4.0	699	6.9	689	6.9	423	4.3	290	2.9	1,079	10.8
Central	21	4.6	26	6.0	22	4.9	18	4.1	6	1.4∇	47	10.8
Dakota County	5	**	7	7.4	5	**	4	**	4	**	11	10.6
Douglas County	121	5.4	168	7.3	145	6.4	115	5.0	57	2.4	279	12.2
East Central	16	4.5	16	4.8	17	5.2	15	4.6	8	2.6	32	9.7
Elkhorn Logan Valley	11	2.4	27	7.2	20	5.5	15	4.1	7	2.1	45	12.3
Four Corners	12	3.9	23	6.7	21	6.6	19	6.3	10	3.2	29	9.7
Lincoln/Lancaster County	49	3.9	96	7.4	92	6.9	47	3.8	37	2.9	141	11.1
Loup Basin	14	4.7	12	5.0	25	9.5	10	3.7	6	2.5	22	8.4
North Central	14	3.4	26	6.6	20	5.2	7	2.7	9	3.0	43	11.3
Northeast	4	**	14	7.0	18	8.8	8	3.8	7	3.5	22	10.1
Panhandle	11	2.8	23	6.2	39	10.7	16	4.3	12	3.2	38	10.5
Public Health Solutions	25	4.9	36	7.7	28	6.2	16	3.8	20	4.5	52	11.7
Sandhills	4	**	2	**	7	9.7	2	**	1	**	10	11.3
Sarpy Cass County	22	3.7	50	7.6	52	7.2	35	5.3	24	3.2	74	11.2
Scotts Bluff County	8	3.2	18	7.0	18	7.1	12	5.0	8	3.5	23	9.4
South Heartland	11	3.1	27	8.1	26	7.6	12	4.5	14	4.8	31	9.1
Southeast	4	**	22	6.9	25	8.1	12	4.1	9	3.2	26	8.9
Southwest	103	5.0	28	10.8	16	6.2	6	2.4	2	**	31	12.0
Three Rivers	18	3.3	45	8.4	35	6.6	26	5.1	18	3.7	59	11.4
Two Rivers	21	3.9	22	3.7▼	46	8.6	25	4.7	24	4.8	43	7.6▽
West Central	10	4.3	11	4.3	12	5.2	3	**	7	3.1	21	8.6

<sup>\*\*</sup>Rate not shown if based on five or fewer events

∇regional rate is significantly lower than the state rate (95% confidence level) ▼regional rate is significantly lower than the state rate (99% confidence level)

Rates are per 100,000 population (excluding gender-specific sites, which are per 100,000 male or female population) and are age-adjusted to the 2000 U.S. population

<sup>∆</sup>regional rate is significantly higher than the state rate (95% confidence level)

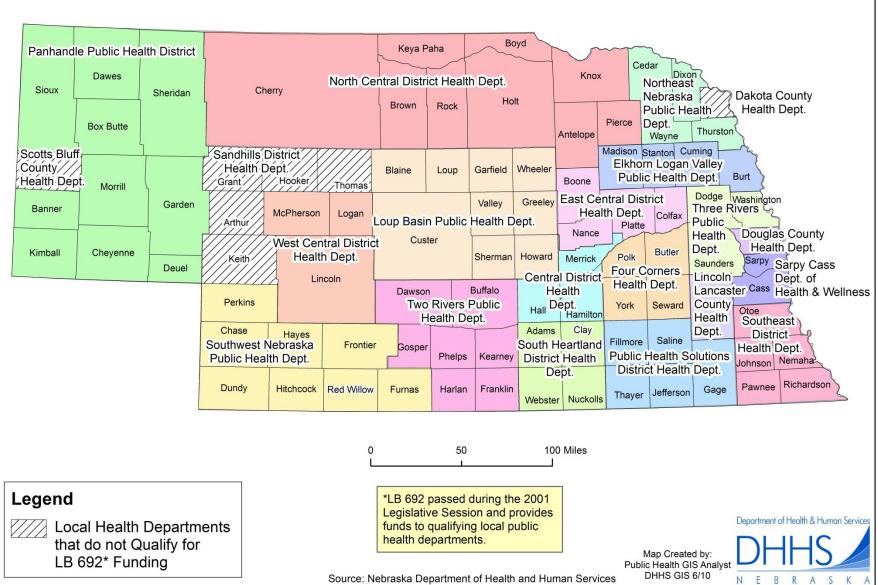
<sup>▲</sup> regional rate is significantly higher than the state rate (99% confidence level)

# Public Health Department Regions in Nebraska

Public Health Department	Jurisdiction, by County						
Central	Hall, Hamilton, Merrick						
Dakota County	Dakota						
Douglas County	Douglas						
East Central	Boone, Colfax, Nance, Platte						
Elkhorn Logan Valley	Burt, Cuming, Madison, Stanton						
Four Corners	Butler, Polk, Seward, York						
Lincoln-Lancaster County	Lancaster						
Loup Basin	Blaine, Custer, Garfield, Greeley, Howard, Loup, Sherman, Valley, Wheeler						
North Central	Antelope, Boyd, Brown, Cherry, Holt, Keya Paha, Knox, Pierce, Rock						
Northeast Nebraska	Cedar, Dixon, Thurston, Wayne						
Panhandle	Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Sheridan, Sioux						
Public Health Solutions	Fillmore, Gage, Jefferson, Saline, Thayer						
Sandhills	Arthur, Grant, Hooker, Keith, Thomas						
Sarpy Cass	Cass, Sarpy						
Scotts Bluff County	Scotts Bluff						
South Heartland	Adams, Clay, Nuckolls, Webster						
Southeast	Johnson, Nemaha, Otoe, Pawnee, Richardson						
Southwest Nebraska	Chase, Dundy, Frontier, Furnas, Hayes, Hitchcock, Perkins, Red Willow,						
Three Rivers	Dodge, Saunders, Washington						
Two Rivers	Buffalo, Dawson, Franklin, Gosper, Harlan, Kearney, Phelps						
West Central	Lincoln, Logan, McPherson						
	Central Dakota County Douglas County East Central Elkhorn Logan Valley Four Corners Lincoln-Lancaster County Loup Basin North Central Northeast Nebraska Panhandle Public Health Solutions Sandhills Sarpy Cass Scotts Bluff County South Heartland Southeast Southwest Nebraska Three Rivers Two Rivers						

# 7

# **Nebraska Local Health Departments**



#### REFERENCES

American Cancer Society. Cancer Facts and Figures 2013. Atlanta, GA: American Cancer Society, 2013. Available at:

 $\underline{\text{http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-036845.pd\underline{f}}$ 

American Cancer Society. Colorectal Cancer Facts and Figures 2009-2010. Atlanta, GA: American Cancer Society, 2010. Available at: <a href="http://www.cancer.org/Research/CancerFactsFigures/ColorectalCancerFactsFigures/index">http://www.cancer.org/Research/CancerFactsFigures/index</a>

Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Available at: http://wonder.cdc.gov/cmf-icd10.html

Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, Whelan S. International Classification of Diseases for Oncology, 3<sup>rd</sup> edition (U.S. interim version 2000). Geneva, Switzerland: World Health Organization, 2000.

Harras A, editor. Cancer Rates and Risks, 4<sup>th</sup> edition. Bethesda, MD: National Cancer Institute, 1996; NIH Publication #96-691.

Kolata G. Reversing Trend, Big Drop Is Seen in Breast Cancer. The New York Times, December 15, 2006.

National Program of Cancer Registries. 1999-2010 Incidence, WONDER Online Database. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute, 2013. Available at: <a href="http://wonder.cdc.gov/cancernpcr.html">http://wonder.cdc.gov/cancernpcr.html</a>

Nebraska Department of Health and Human Services. Nebraska 2010 Vital Statistics Report. Lincoln, NE: Nebraska Department of Health and Human Services, 2011.

U.S. Preventive Services Task Force. Screening for Breast Cancer: Recommendation Statement. AHRQ Publication # 10-05142-EF-2, November 2009. Available at: http://www.uspreventiveservicestaskforce.org/uspstf09/breastcancer/brcanrs.htm

U.S. Preventive Services Task Force. Screening for Colorectal Cancer: Recommendation Statement. AHRQ Publication # 08-05124-EF-3, October 2009. Available at: <a href="http://www.uspreventiveservicestaskforce.org/uspstf08/colocancer/colors.htm">http://www.uspreventiveservicestaskforce.org/uspstf08/colocancer/colors.htm</a>

World Health Organization. Manual of the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> revision. Geneva, Switzerland: World Health Organization, 1992.

#### REPORTING FACILITIES

Ainsworth--Brown County Hospital

Albion--Boone County Health Center

Alliance--Box Butte General Hospital

Alma--Harlan County Health System

Atkinson--West Holt Memorial Hospital, Inc.

Auburn--Nemaha County Hospital

Aurora--Memorial Hospital

Bassett--Rock County Hospital

Beatrice--Beatrice Community Hosp. & Hlth. Ctr., Inc.

Benkelman--Dundy County Hospital

Blair--Memorial Community Hospital

Bridgeport--Morrill County Community Hospital

Broken Bow--Jennie Melham Memorial Medical Ctr.

Callaway--Callaway District Hospital

Cambridge--Tri Valley Health System

Central City--Litzenberg Memorial County Hospital

Chadron-Chadron Community Hosp. & Hlth. Svcs.

Columbus--Columbus Community Hospital, Inc.

Cozad--Cozad Community Hospital

Creighton--Creighton Area Health Services

Crete--Crete Area Medical Center

David City--Butler County Health Care Center

Fairbury--Jefferson Community Health Center, Inc.

Falls City--Community Medical Center, Inc.

Franklin--Franklin County Memorial Hospital

Fremont--Fremont Area Medical Center

Friend--Warren Memorial Hospital

Geneva--Fillmore County Hospital

Genoa--Genoa Community Hospital/LTC

Gordon--Gordon Memorial Hospital District

Gothenburg--Gothenburg Memorial Hospital

Grand Island--St. Francis Medical Center

Grant--Perkins County Health Services

Hastings--Mary Lanning Memorial Hospital

Hebron--Thayer County Health Services

Henderson-Henderson Health Care Services

Holdrege--Phelps Memorial Health Center

Imperial--Chase County Community Hospital

Kearney--Good Samaritan Hospital

Kearney--Good Samaritan Hospital Pathology

Kimball--Kimball Health Services & Hospital

Lexington--Tri-County Area Hospital District

Lincoln—Bryan Medical Center East & West

Lincoln--Saint Elizabeth Regional Medical Center

Lincoln--Pathology Medical Services

Lincoln--Williamsburg Radiation Center

Lincoln--Nebraska Heart Hospital

Lincoln - UNMC College of Dentistry

Lynch--Niobrara Valley Hospital Corp.

McCook--Community Hospital

Minden--Kearney County Health Services

Nebraska City--St. Mary's Hospital

Neligh--Antelope Memorial Hospital

Norfolk--Faith Regional Health Services East & West

North Platte--Great Plains Regional Medical Center

North Platte--Pathology Services

Oakland--Oakland Memorial Hospital

Offutt AFB--Ehrling Berquist Hospital

Ogallala--Ogallala Community Hospital

Omaha--Alegent Health - Bergan Mercy Medical Ctr.

Omaha--Alegent Health - Immanuel Medical Center

Omaha--Children's Hospital

Omaha--Methodist Hospital Pathology Center

Omaha--Nebraska Medical Center

Omaha--Nebraska Methodist Hospital

Omaha--Creighton University Medical Center

Omaha--Boys Town National Research Hospital

Omaha--Alegent Lakeside Hospital

Omaha--Bergan Mercy Medical Center Pathology

Omaha--Bishop Clarkson Hospital Pathology

Omaha--Creighton Pathology Associates

Omaha--Physicians Lab

O'Neill--Avera St. Anthony's Hospital

Ord--Valley County Hospital

Osceola--Annie Jeffrey Memorial County Health Ctr.

Oshkosh--Garden County Health Services

Osmond--Osmond General Hospital

Papillion--Alegent Health Midlands Community Hosp.

Pawnee City--Pawnee County Memorial Hospital

Pender--Pender Community Hospital

Plainview--Plainview Area Health System

Red Cloud--Webster County Community Hospital

Schuyler--Alegent Health Memorial Hospital

Scottsbluff--Regional West Medical Center

Scottsbluff--Western Pathology Consultants

Seward--Memorial Hospital

Sidney--Memorial Health Center

St. Paul--Howard County Community Hospital

Superior--Brodstone Memorial Hospital

Syracuse--Community Memorial Hospital

Tecumseh--Johnson County Hospital

Tilden--Tilden Community Hospital

Valentine--Cherry County Hospital

Wahoo--Saunders County Health Services

Wayne--Providence Medical Center

West Point--St. Francis Memorial Hospital

Winnebago--USPHS Indian Hospital

York--York General Hospital

#### Other States:

Sioux City, IA--Mercy Medical Center

State cancer registries of Alaska, Arizona, Arkansas, Colorado, Iowa, Kansas, Missouri, North Dakota, Oklahoma, South Dakota, and Wyoming

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